

# MARS Station to Support Armed Forces Day

**EDITOR'S NOTE:** This is the last in a series of articles to be published by THE MONMOUTH MESSAGE covering U.S. Army Signal Office operations at Fort Monmouth.

By Loyal G. Evans

Rendering its support to the Armed Forces Day program at Fort Monmouth is the little publicized Signal Office Military Affiliate Radio Systems commonly known as MARS which will afford visitors the opportunity of transmitting messages to military personnel stationed overseas.

The MARS station operates under the call letters of AA2USA and is located in Bldg. 682. Visitors, however, will be given the opportunity to transmit from a field station located at the main outdoor exhibit area.

The station has seven sound proof studios and is capable of continuous coverage from two to 30 megacycles. It is also capable of operating in the six and two-meter amateur bands.

Personnel  
MARS is manned by Signal Office personnel and is directly under control of Maj. George K. Brown Jr., Post signal officer. At the present time 2d Lt. Edward W. Voightman, doubles as deputy signal officer and officer in charge of MARS with Warrant Officer Richard H. Hourigan assigned as assistant officer-in-charge. M-Sgt. Harry L. Bauwens, NCOIC, heads the staff of assigned enlisted personnel which mainly consists of Reservists of the 301st Signal Company (BM), recalled to active duty last October.

In addition to MARS operations, the station is made available for use by licensed amateurs on the post. Amateur operations are confined to those studios which are not being used for MARS.

MARS equipment is capable of running up to 1000 watts on most frequencies. The modes of transmission used at the station are: continuous wave, amplitude modulation, single side band, double side band, and audio teletype.

There is an extensive antenna system consisting of five directive beams, three dipoles, one vertical, and one thimble.

Normal operating hours of the station are from 0800 to 2400 hrs., Monday thru Friday. The station is closed Saturday, Sunday and holidays.

**History**  
Scanning thru a brief history of MARS you would find that shortly after World War I it was recognized that an affiliation between military and civilian amateur radio operators would be highly desirable. Such an association would greatly aid in the mobilization of civilian manpower.

This idea was first promoted in 1921 when the Signal Corps fostered an Amateur Radio Reserve, but its efforts were stagnated by the 1922-23 wave of commercial broadcasting. In November of 1925, a Corps Area Net was established throughout the country.

The March, 1929, 'Signal Corps Bulletin' reported that the system established in 1925 worked effectively during the Vermont floods and the Florida hurricane. This same bulletin also defined a revised plan which designated Fort Monmouth as the Net Control Station for the country.

**Established**  
The MARS organization, as it is known today, was formally established on 26 Nov., 1948, by the secretaries of the Army and Air Force. The system is under the control of the Chief Signal Officer of the Army and the Director of Communications for the Air Force. Under their direction, MARS has been organized into an army headquarters net, six continental Army area nets, state nets for each state, and district and local nets where necessary.

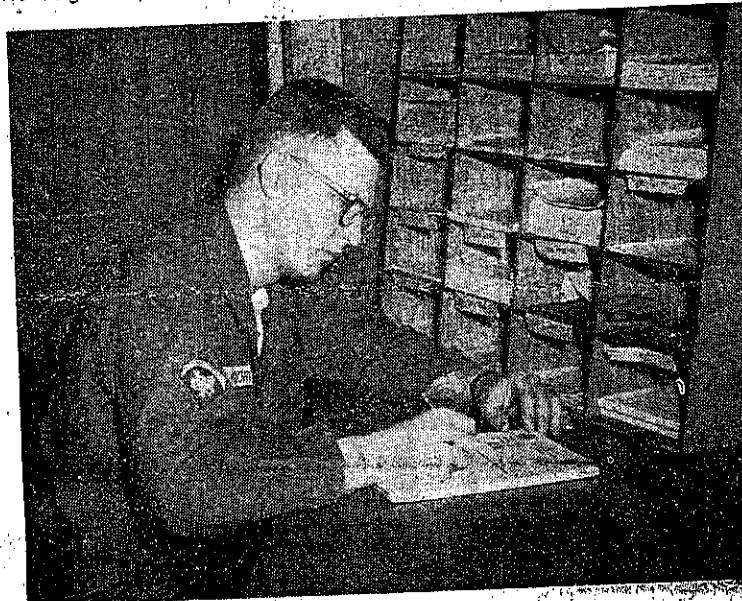
Its purpose is two-fold. First, it serves as backup communication in time of disaster or national emergency. Secondly, the system trains qualified amateur radio operators in proper military message handling.

Membership in MARS is open to any individual in the military service who holds a



**MARS CALLING!**—M-Sgt. Harry L. Bauwens, NCOIC, MARS Station, Post Signal Division, Fort Monmouth, carries on a conversation over the 1 KW Consul radio at the MARS Station, Fort Monmouth, as Lt. Edward W. Voightman, officer-in-charge and deputy signal

officer looks on. Sergeant Bauwens is a member of the 301st Signal Company, BM, a reserve unit recalled to active duty last October. (Photos by Sp4, Comini, Pictorial Branch)



**PRIOR PREPARATION**—Reservist Sp5 Ron Moore, MARS operator, Post Signal Div., Fort Monmouth, prepares a message prior to transmittal over the air on MARS frequencies at the MARS Radio station here.



## Chapel Cornerstone Laying Scheduled Here For Saturday

**FORT MONMOUTH**—A special ceremony in the laying of the cornerstone of the new Post Chapel has been scheduled during the Armed Forces Day program here at Fort Monmouth this Saturday.

The cornerstone will be inserted at a brief ceremony around noontime, immediately after the 15-minute helicopter demonstration which starts at 1145 hrs.

Post officials headed by Maj. Gen. Wm. D. Hamlin, commanding general, chaplains stationed here, the building contractor and Engineer personnel, will attend the ceremony, as well as visitors to the Post here for the Armed Forces Day 'open house.'

The new Post chapel, to be used for religious services in all faiths, is located on the west end of Greeley Field. The red brick structure with silver spire is expected to open sometime next month. It will seat 600 persons and construction cost is in excess of \$500,000.

Seated inside the cornerstone, which is being donated by the contractor, N. J. Builders of Long Branch, will be various

## Officer Seminar Students to Hear General Cook

**FORT MONMOUTH**—Major General Earle F. Cook, Deputy Chief Signal Officer, Office of the Chief Signal Officer, Washington, D.C., will be the principal speaker at the Signal Corps Seminar for the Signal Officer Career Course, U.S. Army Signal School, at Myer Hall Auditorium tomorrow morning. Also addressing the students will be Col. A. W. Reese, coordinator for reorganization planning, OCSiGO.

Colonel Reese is scheduled to speak at 0830 hrs., on the reorganization of the Army and its effect on the Signal Corps.

General Cook will address the students on the meaning of this reorganization of the Signal Corps, its effect on individual careers, and new career opportunities. A question and answer period will follow General Cook's presentation.

The general area of discussion the mission of the Signal Corps, functions of the principal elements, within OCSiGO, major field activities under the command of OCSiGO, Signal Corps combat development, relationship between OCSiGO and the Department of the Army and Department of Defense staffs, and major trends within the Signal Corps.

The officers are scheduled to arrive on Post today. They will be feted at a luncheon tomorrow given by Col. Harry J. Lewis, assistant commandant, USASCS.

## Army's Signal Lab To Display Electronic Art

**FORT MONMOUTH**—The most advanced developments in the art of military electronics will be displayed at the U.S. Army Signal Research and Development Laboratory, Fort Monmouth, on Armed Forces Day. Several parts of the Signal Laboratory heretofore closed to the public will be devoted to equipment displays and demonstrations. Larger field equipment will be shown in Camp Plaza.

**WOMAN CLUB**  
The Home and garden party of the Woman's Club will be at Gibbs Hall, 71 Bearden, president Plans, and discussed for the flower show to be meeting. Mrs. well-known local fl and flower show ed a most inform on flower arrang

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An organization of licensed "Ham" radio operators, MARS' prime purpose is to create interest and further training in military communications. It acts as a backup or auxiliary communications system for military commanders during national or local emergencies, and provides a source of additional trained volunteer radio communications specialists.

MARS also provides a volunteer facility for transmitting personal, morale-type messages between military personnel overseas and parents, relatives, and friends at home.

The MARS station is an integral part of the US Army Signal Center and School, commanded by Brigadier General Thomas Matthew Rienzi. Administrative control of the MARS station falls under the Radio Division, Department of Specialist Training (DST). Lt. Col. Albert C. Johnson, director of DST, is also the director of the MARS station, and Spec. 5 Richard D. Borden is the noncommissioned officer in charge. In addition to Specialist Borden, there are three other enlisted men permanently assigned to the MARS station.

Located on the main post, the MARS station is open seven days a week. Monday through Friday the station operates from 8 a.m. to 11 p.m., and on week ends the hours of operation are from noon to 8 p.m.

The MARS station has two call signs: AA2USA is the MARS call sign used for transmitting over military frequencies; K2USA is the amateur call sign used by "Hams" transmitting from the MARS station over the amateur frequencies.

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# News from The U. S. Army Signal Center and School

FORT MONMOUTH, NEW JERSEY

INFORMATION OFFICE

TELEPHONES: 53-22541 and 53-21435 (Area Code: 201)

28568126

FOR IMMEDIATE RELEASE

## A TRIP TO MARS

FORT MONMOUTH, N.J. - - - What mysteries and challenges will unfold before a visitor to MARS? What terrors await the unwary traveler..... millions of miles through the vast wasteland of space...a sun-scorched red surface with strange, steaming canals...a poisonous atmosphere no man could breathe...horrifying monsters that stagger the imagination... none of these perils await the visitors to the US Army Signal Center and School's MARS.

For the MARS we are talking about is the Signal School's Military Affiliate Radio System at Fort Monmouth, New Jersey. In 1925, a small group of amateur or "Ham" radio operators at Fort Monmouth established the forerunner of the present organization that today stretches around the globe. The organization grew so rapidly that in 1948 it was re-organized as a joint Army-Navy-Air Force program called the Military Amateur Radio System, or MARS. Because of the joint affiliation between the military and civilian radio operators the word "amateur" was replaced by "affiliate", and the word "service" was subsequently changed to "system" to better describe the vast global communications system established through MARS.

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Once the message comes in from the Pentagon, the operator logs it in and then locates the civilian amateur radio operator in the MARS system closest to the addressee, in this case, in Newark. At this point the teletype portion of the process ends.

The Fort Monmouth MARS operator takes the teletype message and gets into the New Jersey State radio network and contacts a "Ham" in the Newark area. The "Ham" in Newark copies down the message and then places a local telephone call to Mrs. Doe and reads her the message. This whole process normally takes about 48 hours.

Messages sent to Vietnam over teletype follow the same basic process in reverse. People come into the local MARS station and fill out a Marsgram. It follows the chain back to the MARS station in Vietnam nearest the addressee's location, and is passed on to him.

Most messages sent via teletype are of a seasonal nature...things such as birthdays, anniversaries, birth of children, and special events are most common, and traffic increases substantially during holiday seasons. The MARS station at Fort Monmouth normally passes about 100 messages a week, but during the Christmas season this increases to almost 1000 per week.

Now let's follow the path a radio message will take. PFC Doe wishes to contact his mother in Newark, this time to tell her he will be home in ten days. Again he goes to the MARS station in Long Binh, but this time he must wait until his call can be put through...this may be an hour or 12 hours, times varying with the weather conditions and the number of people ahead of him.

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The station is equipped with six studios. Two are used solely for communications with Vietnam, and the others may be used by the licensed amateur radio operators. Any licensed "Ham" may use the facilities provided he shows proof of licensing. The station has one 2000 watt transmitter, two 1000 watt transmitters, and two 200-300 watt transmitters.

The communications to and from the MARS station is over two types of equipment, radio and teletype. First, let's examine the path of a teletype message from Vietnam to the United States.

PFC John Doe, stationed in Long Binh, Vietnam, wants to send a birthday message to his mother in Newark, New Jersey. He goes to the nearest MARS station and fills out a Marsgram which includes his name and address, the name, address, telephone number, city and state of his mother, and the message.

The teletype operator in the Long Binh MARS station will type the message on the teletype machine where it is relayed to Hawaii. All MARS teletype messages from Southeast Asia are sent to Hawaii. the Hawaiian station then transmits PFC Doe's message to the MARS headquarters station in the Pentagon in Washington, D.C. The Pentagon station receives all the messages and breaks them down into certain geographic areas and transmits them to the closest MARS station. In this case, PFC Doe's message, going to Newark, is transmitted to the Fort Monmouth MARS station. The Fort Monmouth station handles all teletype messages for New York, New Jersey, and Pennsylvania.

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For PFC Doe the Red Bank operator places the long distance call to Newark to Mrs. Doe. The Fort Monmouth MARS operator then explains to her that she will be receiving a call from her son in Vietnam and that it is a radio-telephone call and certain procedures must be followed. He tells her that it will be a one-way conversation, that is, that only one person can speak at a time, and when she is finished talking she must say "over" so the party at the other end will know she is finished talking and he may now speak.

The circuit works like this: PFC Doe speaks into the telephone in Vietnam; it is patched into a radio at the Vietnam MARS station and transmitted to the radio at the Fort Monmouth MARS station; the Fort Monmouth operator patches it into the local telephone operator who then places the long distance call over commercial telephone lines to Mrs. Doe. A typical conversation would go something like this:

PFC Doe: Hello, Mom, over.  
 Mrs Doe: Hi, John, how are you, over.  
 PFC Doe: I'm just fine, Mom, how are things at home, over.  
 Mrs Doe: Everything's OK here. When will you be home, son, over...

Each telephone call is limited to five minutes so that others waiting in Vietnam may get their turn. The Fort Monmouth MARS operator will continue to take listings and make the calls as long as phone patch quality lasts.

Many times the Fort Monmouth operator acts as an interpreter. Wives and mothers, in the excitement of the moment, forget to say "over" when they finish speaking, so the MARS operator must say it so that the party in Vietnam may speak. Sometimes the people in the States can not understand exactly what the party in Vietnam is saying, so the MARS operator, familiar with the sometimes garbled voices, acts as a third-party translator.

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The radio operator at the Fort Monmouth MARS station has been in radio contact with seven different MARS stations in Vietnam, including the one in which PFC Doe is waiting. No messages, however, can be passed until "phone patch quality" between the stations is reached. Phone patch quality means that the quality of the voice message at both Long Binh and Fort Monmouth must be such that both parties can clearly understand each other. As Spec. 4 James Condon, a radio operator at the Fort Monmouth MARS station, and a MARS operator in Vietnam for six months, said, "Sometimes we can get phone patch quality for 10 to 12 hours a day, and sometimes not at all. It all depends on the atmospheric conditions."

After phone patch quality is reached, the Fort Monmouth operator asks each of the seven Vietnam MARS stations for two listings. These listings will be of two individuals waiting at the Vietnam station to make the call and will include his name and address, and the name, address, telephone number, alternate telephone number, city and state of the person he wishes to call.

After compiling all the listings from the Vietnam stations, the Fort Monmouth operator goes back to the first station and gets the first man on the radio...let's say it is PFC Doe. The Fort Monmouth MARS operator then contacts the local city telephone operator in Red Bank, New Jersey, and tells her he has several long distance MARS telephone calls to be placed. Usually the same local operator will handle all the calls as long as phone patch quality with the Vietnam stations continues, or until the local operator goes off shift and another one will then take over processing the calls.

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The ability to use MARS as a means to contact their families from a remote outpost is one of the biggest morale boosters provided to our fighting men in Southeast Asia," he concluded.

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All of these telephone calls from Vietnam are collect. The person receiving the call is charged with the normal rate from the MARS station in the United States to the local address. In our case, Mrs. Doe will be charged for a five minute long distance call from Red Bank to Newark, a small price to pay for the opportunity to speak with loved ones many miles away.

The Fort Monmouth MARS station processes between 300-400 calls per week, depending on weather conditions. As with the teletype operation, traffic rises sharply during holiday seasons.

Most of the radio-telephone traffic between Vietnam and the United States originates in Vietnam. However, in an emergency when no other means of communication is available, messages can be sent from Fort Monmouth's MARS station to Vietnam and be passed on to the addressee; 10-15 of these messages are passed each month, but this type of traffic is normally passed over the teletype system.

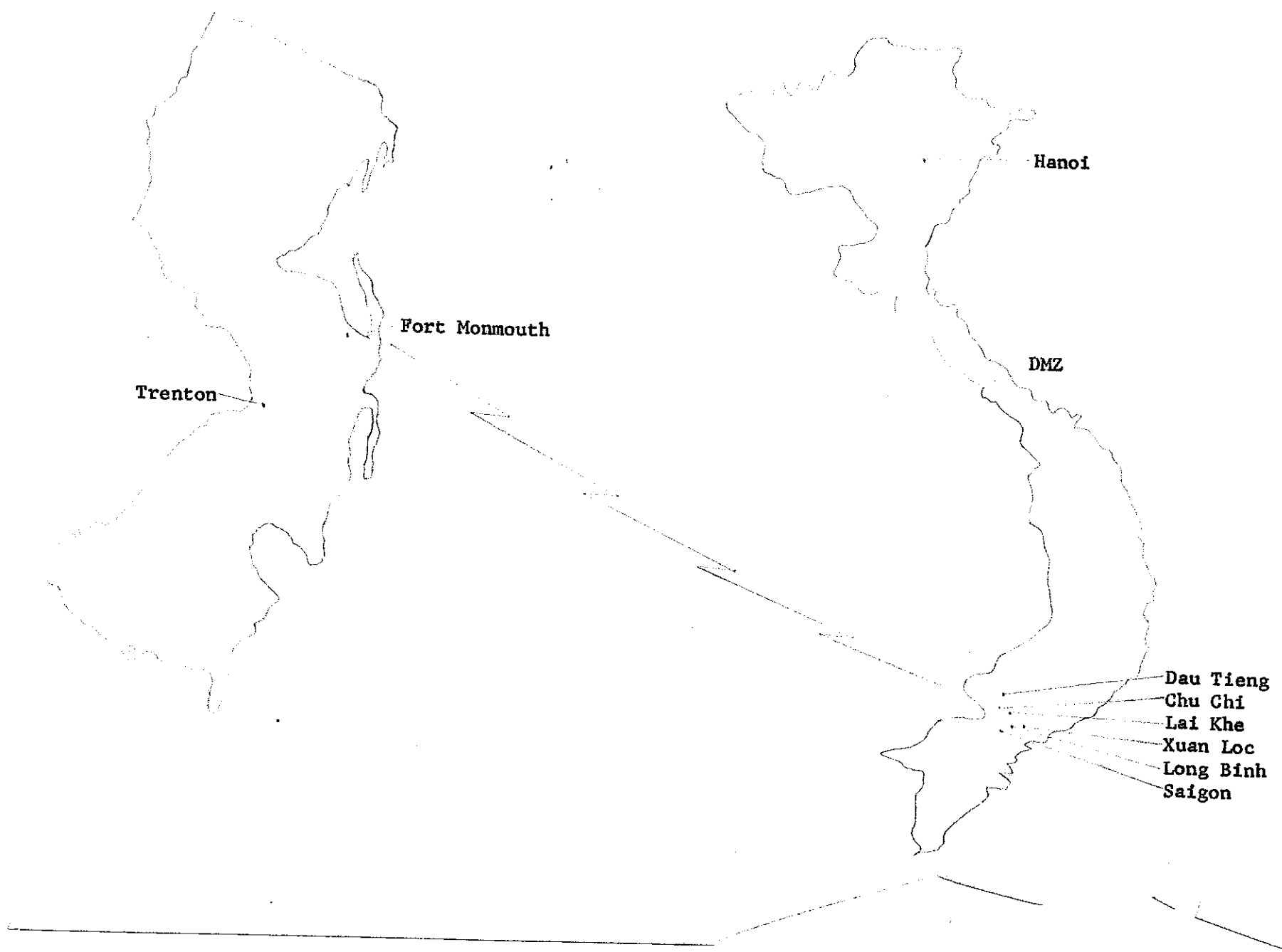
Fort Monmouth's MARS station makes normal radio contact with seven MARS stations in Vietnam: AB8AJ in Chu Chi; AB8USA in Long Binh; AB8AO in Xuan Loc; AB8AT also in Long Binh; AB8AAA in Saigon; AB8AAB in Lai Khe; and AB8AAC in Dou Tieng.

Lt. Col. Johnson, MARS director at Fort Monmouth, in describing the effectiveness and accomplishments of the station, said, "We try to live up to the true tradition of the Signal Corps in that we do our utmost 'to get the message through.' MARS is fortunate to have the dedicated, conscientious operators who fully appreciate the importance of providing our men in Vietnam a communications link to their loved ones in the States.

MORE

NEW JERSEY

VIETNAM



Trenton

Fort Monmouth

Hanoi

DMZ

Dau Tieng  
Chu Chi  
Lai Khe  
Xuan Loc  
Long Binh  
Saigon

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The trailer has capabilities for high-frequency single-sideband FM, FM-VHF and teletype communications. His communications unit can also handle telephone and telephone patch traffic. During a disaster he can render aid to such agencies as the Red Cross, Civil Defense, police and local authorities.

According to Maj. Ohlenburger, "people just don't realize what can be done with the MARS network. In my military assignments I've done quite a bit of traveling. I've seen a few disasters and I know how important communications are to ~~many~~ stricken areas." In such emergencies you strive to keep communications flowing out, from the stricken area to families of the disaster victims. This technique can save as many as seven incoming messages.

Class leader of the year-long Communications Electronics Systems Engineering Course #59 here, Maj. Ohlenburger is deeply interested in the military-civilian community relationship. He says, "I am involved because there are very few active military with MARS. Most operators are retired military or civilians. I believe military MARS members can be a great asset to their communities."

Recently the N. J. State MARS (NJSM) Association held its semi-annual simulated disaster exercise, Operation Snowdrift. The members operate as if New York and New Jersey were blanketed with a heavy snowfall and few roads had been cleared.

(MORE)

*Sp4 Ken Veloski*  
*1974*

## News from The U.S. Army Communications Electronics School

FORT MONMOUTH, NEW JERSEY

INFORMATION OFFICE

TELEPHONES: 53-22541 and 53-21435 (Area Code: 201)

# 11174 1225

FOR IMMEDIATE RELEASE

FORT MONMOUTH, N.J. - People from MARS can assist in saving your life and the lives of others if a natural disaster strikes in this area. One of these men from MARS is Major Clifford C. Ohlenburger, a student at the Army Communications Electronics School.

Maj. Ohlenburger is an operator for the Military Affiliate Radio System (MARS) whose membership is dedicated to providing additional radio circuits and radio communications personnel in local or national emergencies. In the state of New Jersey alone there are 160 people ready for such emergencies.

Not only is the native Texan active as a MARS operator, he built his own totally mobile communications unit now stationed behind his quarters on post. An avid radio operator since "before I knew what radios really were," the major built the mobile unit from the ground up at his own expense. Part of the equipment, such as the VHF transceiver and an auxiliary generator, installed in the mobile unit was made available through the MARS program. The remainder of the equipment was purchased at his own expense.

(MORE)



MARS STATE DIRECTOR Carver Washburn of Wayne, N. J. acts as net control station in establishing a teletype net.

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Under the direction of Carver Washburn, Wayne, state director, NJSM, and Col. William Greer (USA Ret), Allenhurst, operations officer, MARS operators handled communications traffic relaying messages for medical supplies and assistance.

Maj. Ohlenburger assisted in the exercise which he termed "hugely successful."

A graduate of Burbank High School and St. Mary's University, San Antonio, Tex., he entered the Army in 1960 with an ROTC commission. Before coming to the CF School he had been assigned to the Combat and Training Developments Aviation Agency at ~~Fort~~ Ft. Rucker, Ala.

He and Mrs. Ohlenburger, with their two children, live on post at 15 Russel Ave. He is the son of Mr. and Mrs. Norman Ohlenburger, 659 W. Theo Ave., San Antonio.

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# the VOICE

SERVING THE PERSONNEL OF THE FIRST UNITED STATES ARMY

FT. GEORGE G. MEADE, MARYLAND

FRIDAY, JANUARY 28, 1972

## Gen. K. L. Johnson set to arrive assume DCGRF duties

## K's winner RS trophy

Maj. Gen. K. L. Johnson, who received his commission through officers' candidate school, has been named the new First Army deputy commanding general for reserve forces.

General Johnson is scheduled to assume his new position February 1. He succeeds Maj. Gen. Charles M. Mount Jr. who is retiring from active duty January 31.

The 51-year-old general will be coming to the "First in Deed" Army headquarters at Ft. Meade, Md., from the Department of the Army where he has served as chief of personnel operations since August of last year.



K. L. Johnson

General Johnson, who spent his childhood in Minnesota, enlisted in that State's National Guard in 1940 and, the following year, was called to active duty. He received his commission as an Infantry second lieutenant in 1942.

Since then he has had 20 assignments, his first being platoon leader, 363d Infantry, 91st Division, at Camp White, Oregon.

General Johnson's other duties have included those of provost marshal, 68th Constabulary Squadron, in Europe; instructor and group chief, Airborne Department, The Infantry School, Ft. Benning, Ga.; joint plans officer and executive assistant to the Deputy Chief of Staff for Foreign Affairs and Logistics, the staff of the Commander-in-Chief, Pacific; assistant division commander (maneuver) 2d Infantry Division; and commander of the 7th Infantry Division.

In May of 1970, he was assigned to DA's personnel operations office where he served as deputy chief before assuming the duties as chief.

The general's awards and decorations include the Senior Parachutist Badge with two combat stars, the Distinguished Service Medal and the Silver Star.

General Johnson has attended the Command and General Staff College and the Army War College. In 1966, he received a Bachelor of Science degree from the University of Maryland.

ed the presentation ceremony in his present capacity as chief of the MARS Program, Department of the Army. Gruber has contributed to the MARS program in more ways than one!

The most recent award is not the only recognition "Gene" Gruber has received for his years of work. Pennsylvania awarded him a Legislative Citation in 1970. He has also received a letter of congratulations from President Richard M. Nixon for his amateur radio work on W3NFX, his other call sign.

Not content to be merely a vital link in the MARS program, Gruber has also contributed to the research and development of equipment and new uses for it, as well as improving procedural handling of calls. He also sits on the Pennsylvania Civil Defense Council and is a member of the Post Office Radio Net.

### To determine First Army's entries

## Their job calls for them to eat

Imagine a job that offers free travel and all the food one can eat.

That's the assignment of a team of judges currently traveling through the 15-state, First Army area, to determine the two best Army dining facilities. The winners will then be nominated to compete for the Philip A. Connelly Award for Excellence in Army Food Service.

This annual award honors the late Philip A. Connelly who for many years

assisted the armed forces food services awards program. Its purpose is to recognize excellence in the preparation and serving of food in troop dining facilities in the Army.

Winners in the First Army competition will be announced in each of two categories, including units feeding less than 200 and units feeding more than 200.

Facilities competing for the award

will be judged on the quality of food served, efficiency of preparation, sanitation, and appearance of the food service personnel. An additional, important criterion, of course, is how well the soldier likes the food.

In addition to the recognition received locally, the two top First Army dining facilities will also be nominated for the world-wide competition to begin May 1. It is at this level that the Philip A. Connelly award will be given.

(Continued from page 17)

carry the tent group equipment. A requirement exists for a 100-pound ahkio to carry the equipment of a 5-man fire team."

Another R&D requirement is for an all-terrain squad existence load carrier, lightweight, air-transportable and usable in skiing (towing the infantry squad on skis). One of the three kinds of tracked vehicle USARAL now uses almost meets this requirement. It is the M-571 articulated utility carrier made in Canada. USARAL has the



ATC COMMANDER COL David J. Schumacher (center) makes a point during Environmental Test Planning Conference conducted by U.S. Army Test and Evaluation Command at Aberdeen (MD) Proving Ground. From left are LTC J. M. Bowers, U.S. Army Tropic Test Center, Canal Zone; MG Charles P. Brown, TECOM commander; and William M. Snider, chief Test and Engineering Division, Yuma P.G.

only ones in the U.S. Army—12 in use and one in reserve.

As this carrier dies out (no parts or replacements available), USARAL will be completely without small all-terrain vehicles, a situation the command "has been fighting for years."

The ATC is testing the military potential of the commercial ½-ton payload Trail Truck for interim use during development of a desired ¾-ton payload vehicle.

Besides the M-571, USARAL has as tracked vehicles the M-548, a 6-ton cargo carrier, and the M-578 recovery vehicle. The M-548 also tows 105-mm and 155-mm howitz-

ers. The Northern Warfare Training Center recently acquired two Thiokol tracked vehicles that are being considered for logistical support of winter field training, medical evacuation, and for packing snow on slopes where ski training is given.

USARAL has stated a requirement for a surface-effects vehicle (SEV) with a 25 to 30-ton payload capability. The SEV is conceived as a supplemental means of mobility, and not as a replacement for aviation, tracked or wheeled vehicles, command officials emphasize.

Terrain-wise, it has been determined that at least half of Alaska is navigable by SEV. There are times when, and conditions under which, a SEV might do what nothing else could accomplish in logistics, USARAL reports.

In 1972 USARAL personnel plus scientists and engineers from the U.S. Army Cold Regions Research and Engineering Laboratory (CRREL), Hanover, NH, conducted a

#### How Cold Does it Get at Fort Greely? 82d Airborne Soldiers Can Answer That

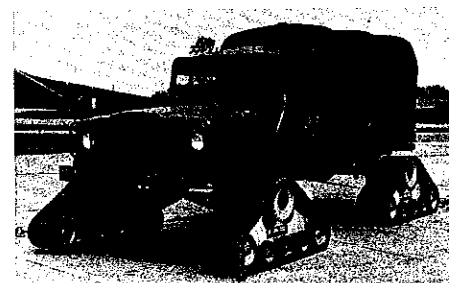
How cold does it get at Fort Greely? Emphatic language in answering that question might be used by 13 soldiers of the 82d Airborne Division, Fort Bragg, NC, who returned from nearly six months TDY at the Arctic Test Center.

Part of the time they slept in unheated tents when the temperature often was 20 degrees below zero, and one time dropped to -57. Electrodes were taped to big toes and faces to record data on physical condition during tests of protective clothing.

During the days they tested cold weather face masks, parka hoods, military skis and other cold-weather equipment. Tests included participation in airborne and airmobile maneuvers, and cross-country treks on skis and snowshoes with 30 to 45-pound back packs.

7-month SEV concept experiment, using a Bell SK-5, under direction of the USARAL Combat Developments Section.

The 6½-ton craft used in the experiment was the kind that had been tested in Viet-



UNA TRACK KIT mounted on 1¼-ton, 4 x 4, M715 cargo truck was evaluated in October 1973 at U.S. Army Arctic Test Center and at Aberdeen (MD) Proving Ground as a possible mobility extender for use with Army 2-wheel-drive vehicles.

nam, having a 4-ton payload and a cruise potential of 60 miles an hour. In Alaska it was operated over all types of terrain, plus snow, ice and water, and in warm and subzero temperatures.

The Arctic experiment showed that the SEV (also known as hovercraft or air-cushion vehicle) has good potential to perform in a military logistical role year-around. USARAL's report on the trial recommended that a SEV with a greater payload be acquired and evaluated by an Army Materiel Command agency.

CRREL researchers are planning to conduct an advanced field study to define more completely the military potential of the SEV in Alaska. Experimental use of a demonstration vehicle is contemplated, possibly using the 25-to-30-ton payload Voyageur made by Bell Aerospace in Canada.

USARAL also has tried both single-track and double-track snowmobiles, but the test report is that they have not proved effective for long-range operations. The rough terrain, cold extremes and varying snow conditions—plus the vast distances involved—reportedly pose difficult logistical support problems.

Members of the 1722 Brigade, which has 15 snowmobiles, set forth in March 1973, on a 1,000-mile trek from Fort Richardson through the Alaska Range and on north to Nome, Alaska. It was a test of the feasibility of such a movement and a survival training mission.

The expectation was that the trip would take 15 days. Bad trail conditions and extreme cold, plus "numerous mechanical difficulties," added four days to the estimated time. Aerial resupply kept the group going.

Snowmobiles have been used by USARAL in patrolling, carrying light loads of supplies and equipment (sometimes towing the ahkio), and skijoring. Experience to date supports the belief that the snowmobile is "better suited to recreational use than military operations."

The polar projection map shows Alaska's key position astride the Great Circle Route between North America and the Orient. That, and the fact of the 49th State's great size, puts emphasis on the need for a highly mobile, auroral-environment-trained military force, USARAL reports.

USARAL has the environmental expertise. It has great mobility under favorable flying conditions. Recognized is that there is much room for improvement with respect to suitable equipment for surface movement—particularly in summer when thousands of square miles of wet flat lands and many fast rivers are difficult to cross.

## Military Radio System Marks Twenty-Fifth Year of Service

MARS, a by-word with millions of American servicemen serving overseas, who have used the Military Affiliate Radio System for low-cost telephone patches and written messages to family and friends in the United States, marked its 25th anniversary Nov. 26.

Prior to the mission transfer of the system to the U.S. Army Communications Command (USACC) at Fort Huachuca, AZ, May 1, MARS was under the Department of the Army Office of the Assistant Chief of Staff for Communications-Electronics.

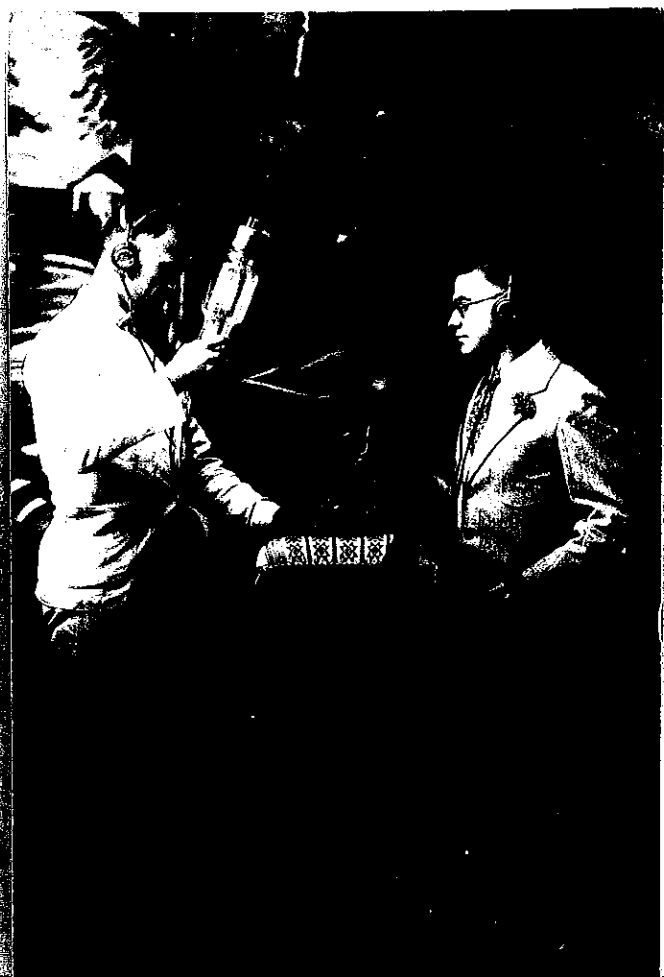
The primary purpose of MARS is to provide auxiliary communications for military, civil and disaster relief officials during emergencies. It also serves to train amateur radio operators in military communications as well as handling morale and quasi-official record and voice traffic for Armed Forces personnel throughout the world.

At the time MARS was established in 1948,

under authority of the Secretaries of the Army and Air Force, membership was limited to military personnel with valid amateur radio operator licenses issued by the Federal Communications Commission or under regulations of U.S. overseas commanders.

In November 1950, membership was opened to licensed civilians at least 21 years of age who had radio stations capable of operating on certain military frequencies. Three years later the age limit was lowered to 16 to permit younger radio hams to participate in MARS prior to formal military service.

As MARS enters its 26th year of dedicated service to the Armed Forces, the community and the nation, it salutes some 5,500 military and civilian operators throughout the world. Typical of the volunteers serving the system, MARS members devote more than 100,000 hours a month handling some 83,000 messages and phone-patch calls.



Fred Elson  
at the  
dedication  
of the  
Earth-Mars  
trophy 73

J. A. Hardy

C O P Y

MAJOR GENERAL WALTER E. PROSSER  
120 WEST CRAIG PLACE  
SAN ANTONIO 12, TEXAS

May 11, 1958.

Major General W. Preston Corderman, USA.  
Headquarters,  
Fort Monmouth, N. J.

Dear General Corderman:

Thanks for your letter of April 28th. It has never occurred to me that those old radio pamphlets had any particular value. I see from your letter that they still possess value for the US. Army Signal Corps Museum. I will be very glad to send any early signal manuals that I find when I find time to go thru my old files. I came into the Signal Corps in 1909 and radio was very new to all of us. In 1910 I served in Company "E", Signal Corps with the first radio field sets at some maneuvers on the Pacific Coast and later on in 1911 on the Mexican Border with those field sets. When I was G-2 of the Philippine Department in 1924-5-6 Fred Elser had the best amateur radio station on the island of Luzon. It was at that period that Fred became interested in the Signal Corps and later on an officer of the Corps. Fred was a fine, studious young man at that time and later served with definite credit the Signal Corps and his country. I wish him well.

With warm personal regards and good wishes,

Sincerely,

/s/ Walter E. Prosser

/t/ Walter E. Prosser,  
Maj. Gen. Retd.

C O P Y

*Original letter  
in file # 44-100-100*

GOODWIN L. DOSLAND, W4TSN, PRESIDENT  
WAYLAND M. GROVES, W5NW, VICE PRESIDENT  
PERCY C. NOBLE, W1BVR, VICE PRESIDENT

A. L. BUDLONG, W1BUD,  
SECRETARY & GENERAL MANAGER

F. E. HANDY, W1BDL, VICE PRESIDENT  
DAVID H. HOUGHTON, TREASURER

# THE AMERICAN RADIO RELAY LEAGUE

INCORPORATED



ADMINISTRATIVE HEADQUARTERS

OFFICIAL ORGAN: QST

WEST HARTFORD 7, CONNECTICUT, U.S.A.

May 14, 1958

Commanding General  
U.S. Army Signal Engineering Laboratories  
Fort Monmouth, New Jersey  
Attn: SIGFM/EL - FA  
G. J. Eltz  
Director  
Engineering Facilities Division

Dear Mr. Eltz:

Please excuse the delay in answering your letter of April 8th.

Concerning the photographs, the only thing I can contribute is the enclosed photograph showing Colonel Elser at the dedication of the Earth-Mars trophy.

Although I cannot give you the original glossy photographs, I can refer you to the following issues of QST, and it is possible that suitable reproductions from the half tones therein might be made. I refer you specifically to page 51 of QST for May 1926 and page 10 of September 1927.

I'm sorry that we can not be of more concrete assistance to you.

Sincerely yours,

*Richard L. Baldwin*

Richard L. Baldwin, W1LKE  
Managing Editor, QST

RLB/sls

*44-356, 10 May 58*

Phillips/emt

1 MAY 1958

SIGFM/DC-A(MU) 314.7

SUBJECT: Transmittal of Amateur Radio Photographs

TO: Chief Signal Officer  
Department of the Army  
Washington 25, D. C.  
ATTN: Mr. T. E. Gootee  
Office of Technical Liaison

1. For telecon, forwarded for use and retention in your office are eight (8) photographs of amateur radio and its operators, each of which is documented on the reverse side.

2. It is requested that either a copy of the published article by Colonel Fred J. Elser with illustrations or information as to where the publication may be obtained, be furnished the Museum and Historical Division, Building 551, this installation.

FOR THE COMMANDER:

8 Incl  
Photographs

C. W. ROGERS  
Lt Col, SigC  
Acting Adjutant General

CLARENCE R. GIBBS  
Lt Col, SigC  
Office of the ADPC

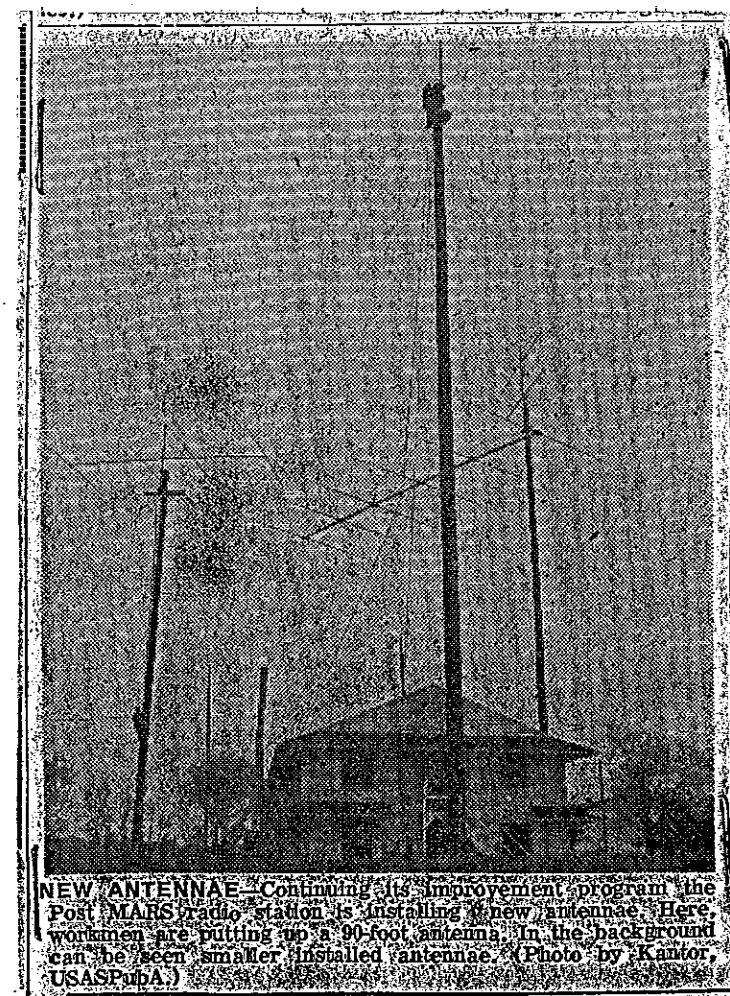
28 MAY 1 12 58

OFFICIAL  
Museum and Hist Div 30 Apr 58 NCP

COPY FOR: Mus & Hist Div

HELEN C. PHILLIPS  
Chief, Mus & Hist Div

The Monmouth Message, Thurs., May 8, 1958 13



CIRCULAR }  
No. 279 }WAR DEPARTMENT  
WASHINGTON 25, D. C., 14 September 1946

Effective until 14 March 1948 unless sooner rescinded or superseded

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- I. AMATEUR RADIO OPERATION.** 1. To encourage training, create interest in radio communications, and for morale purposes, use of Army-owned radio equipment in the amateur bands is authorized (as an exception to par. 5e, AR 35-6520) on posts, camps, or stations provided--
- Approval of the commanding officer is obtained.
  - Equipment is available within authorized allowances at the post, camp, or station and the installation or use for this purpose will not cause excessive replacement or maintenance requisitions, special procurement, or expenditure of funds.
  - The station is operated in accordance with existing Federal Communications Commission rules and regulations or regulations promulgated within a theater of operations and operated by military personnel holding valid amateur operator license and then only to the extent as is authorized by the post, camp, or station commander.
  - All equipment used in connection with amateur operation remains under control of an accountable officer and will be issued to military personnel on memorandum receipt.
  - Modification of equipment will be kept to a minimum and only to such an extent that equipment can be returned to its original condition.
  - As far as practicable, stress be placed on group use in order that maximum benefit may be obtained with minimum equipment.
2. The removal of Army-owned radio equipment from camp, post, or station for amateur operation is not authorized.  
(AG 413.44 (4 Sep 46))

**II. AWARD.** Effective 15 September 1946, paragraph 3 and the first sentence of paragraph 4, section I, WD Circular 54, 1946, are rescinded and the following substituted therefor:

3. **TIME LIMITS.** Recommendations for plaques may be initiated at any time based on service performed during any period of at least 60 days duration subsequent to 1 January 1944 and for service performed during any period of at least 6 months duration subsequent to 1 February 1946. Plaques will not be awarded for services performed subsequent to 15 September 1946. Only one plaque will be awarded to any one organization.



tar in lieu of the plaque will be awarded for all subsequent periods of 6 months or more during which the unit qualifies for the award. Recommendations for stars will not be initiated for periods of service of less than 6 months duration.

WHOM AWARDED. The commander of any force, command, or installation is commanded by, or is the appropriate command of, a major general or officer of higher grade may award plaques prior to 2 March 1947. Not to 2 March 1947 all recommendations for award of the Meritorious Unit Plaque will be forwarded to the War Department for action.

\* \* \* \* \*

0.6 (23 Aug 46))

**CIRCULAR.** Section V, WD Circular 387, 1944, which expires 30 June 1946, and section IV, WD Circular 161, 1945, which expires on 1 July 1946, will remain in effect until such time as rescinded or amended, but in no case beyond 31 December 1946.  
1 (29 Aug 46))

**GENERAL PRISONER.** 1. When it is determined that a general prisoner, hospitalized in the continental United States, will require additional hospitalization (more than 30 days) after the expiration date of his sentence, this fact, together with a report from the commanding officer of the hospital as to diagnosis, probable duration of hospitalization, and additional treatment required, will be communicated to The Adjutant General, Washington 25, D. C., Attention: Correction Branch, for consideration and necessary action.

A general prisoner hospitalized beyond the expiration date of his sentence will be carried by the hospital in the detachment of patients. Every patient attached unassigned if his discharge has not been completed. If discharge from the Army has been accomplished, the former prisoner will be carried by the hospital as a civilian patient. The provisions of paragraph 7h, AR 40-590, until his disposition at the nearest medical facility can be accomplished.

If a service record is not readily available, hospitals have authority under paragraph 67, TM 12-230A, to prepare a temporary service record in order to comply with a blue seal letter discharging a general prisoner.

1 (9 Sep 46))

**MAINTENANCE.** 1. Responsibilities for the technical supervision of the maintenance of War Department equipment are established as follows: The Commanding General, Army Air Forces, and chiefs of technical services are responsible for technical supervision of the maintenance of materiel for which they have been assigned primary maintenance responsibility by the War Department. Technical supervision of maintenance encompasses the promulgation of technical maintenance doctrine, covering all phases and/or echelons of maintenance and the development of inspection procedures for determining that these doctrines are being followed. It also includes the establishment of standards of service and the issuance of catalogs, manuals, and instructions regarding types and utilization of tools and equipment, and prescribing methods and layouts necessary to achieve these established standards. Technical supervision as described herein is not to be construed as giving control of a maintenance facility, which embraces organization, administration, and operation in accordance with prescribed procedures, including the formulation of working procedures otherwise specified by higher authority in connection with technical

supervision, all of which are prerogatives of command normally exercised by the arm, service, unit, or establishment responsible for the mission of the facility.

2. Section IV, ASF Circular 224, 1944, is rescinded.  
(AG 400.402 (11 Sep 46))

**VI. NONAPPROPRIATED FUNDS.** Paragraph 8, WD Circular 50, 1946, is rescinded and the following substituted therefor:

8. A monthly report of the status of the post civilian welfare fund will be prepared by the custodian on the prescribed form (see fig. 1) as of the last day of each month. Local reproduction of this form by typewriting process is authorized. The report will be prepared in each class I, II, and III installation and is assigned Reports Control Symbol WDOCW-1.  
(AG 331.32 (10 Sep 46))

**VII. OVERSEA RECRUITING PROGRAM.** Commanders in all echelons will immediately take steps to insure that each short-term enlistee will be given a personal, private interview by a unit recruiting officer at least 1 month prior to his departure for the zone of interior, or 1 month prior to discharge in the zone of interior. This interview will be held to explain to short-term enlistees the benefits of reenlisting for 3 years and will include such matters as Army policies on career training, service schools, assignments, and complete data which would interest potential reenlistees.

(AG 341 (15 Jul 46))

**VIII. RECREATIONAL EQUIPMENT.** 1. **GENERAL.** a. The Chief, Special Services Division, is responsible for determining the requirements for recreational equipment for the Army.

b. Recreational equipment will be procured, stored, and issued by the appropriate technical service in accordance with directives issued by the Chief, Special Services Division.

c. Equipment, materials, supplies, and services provided under the terms of this circular will be for the exclusive use of enlisted personnel in accordance with section III, WD Circular 250, 1946, and AR 210-50 (Nonappropriated Funds).

d. The supply of 16-mm motion picture equipment for entertainment is a function of the Army Pictorial Service, Office, Chief Signal Officer. The supply of 35-mm motion picture equipment and all entertainment films is a function of the Army Motion Picture Service, Special Services Division.

2. **DISTRIBUTION IN CONTINENTAL UNITED STATES.** a. **Policy.**

- (1) All recreational equipment provided by the Special Services Division will be supplied to all units, posts, camps, stations, and installations in the United States through the Commanding Generals of the Army Air Forces, Army Ground Forces, armies, and the Military District of Washington, (hereinafter referred to as major commands) whose responsibility it will be to control the issue and redistribution of such equipment in accordance with established War Department policies relating to special services activities.
- (2) Library books (including fiction and nonfiction), other types of reading materials (including magazines, newspapers, and pamphlets), and library equipment and supplies purchased with appropriated funds are provided as prescribed in section III, WD Circular 250, 1946, and with nonappropriated funds as provided in AR 210-50.
- (3) Troop units under orders for oversea movement, to which recreational equipment has been issued or which have recreational

equipment acquired by other means, will be allowed to retain such equipment to the greatest extent possible under War Department regulations.

#### Procedure.

- (1) The Chief, Special Services Division, will allot to each major command, quarterly credits for recreational equipment to be supplied in kind. Such credits will be allotted at least 30 days in advance of the quarter in which the credits may be used, and will be computed on the basis of troop strength figures furnished by the War Department. Requisitions will be placed by the major commands on the Kansas City Quartermaster Depot for supply in accordance with current price lists furnished by the Special Services Division, with the exception of requisitions for musical equipment as noted in (2) below.
- (2) Musical equipment requisitions will be submitted by major commands to the Chief, Special Services Division, subject to editing action based on availability.
- (3) Recreational equipment for use in staging areas and on hospital ships and transports will be supplied within the limits of availability. Requisitions for such equipment will be forwarded by the responsible port of embarkation to the appropriate major command for editing and approval. Major commands, in turn, will forward approved requisitions to the Chief, Special Services Division, for such action as is deemed appropriate. The Chief, Special Services Division, will furnish advice of unobligated credits so allotted, to the appropriate major commands.
- (4) If the need for special services supplies within a major command exceeds current allotments, requests for additional credits will be submitted to the Chief, Special Services Division, with accompanying justification.
- (5) All requisitions for recreational equipment from units, camps, posts, stations, and installations will be directed to the commanding generals of the appropriate major command for action.
- (6) The Kansas City Quartermaster Depot will advise monthly the commanding generals of each major command of the unobligated credits for their commands on record at that depot. The Kansas City Quartermaster Depot will also furnish the Chief, Special Services Division, advice as to the unobligated credits of each major command.
- (7) Unexpended quarterly credits may be carried over into subsequent quarters of one fiscal year; however, no credits may be carried over from one fiscal year into the next fiscal year.

#### Disposition of excess equipment.

- (1) Recreational equipment procured with appropriated funds which becomes excess will be reported by class I, II, and III installations in accordance with the provisions of TM 38-419, Disposition of Excess and Surplus Personal Military Property in the Continental United States.
- (2) Recreational equipment donated or procured from nonappropriated funds, with the exception of libraries, which becomes excess, will be disposed of as provided in AR 210-50.
- (3) Libraries which become excess, whether procured from appropriated or nonappropriated funds, or donated, will be disposed of in accordance with the provisions of section I, WD Circular 137, 1946.

- (4) When a post, camp, or station becomes inactive or surplus, recreational equipment will be retained by the units affected and transported with them to their new domestic stations within the limits of available and authorized transportation. Equipment which cannot be transported with the individual unit will be disposed of in accordance with (1), (2), and (3) above.

3. RECREATIONAL EQUIPMENT OF UNITS ON OVERSEA MOVEMENT ORDERS. a. Commanders of organizations on oversea movement orders are encouraged to ship, as organizational equipment, unit-owned or issued recreational equipment and to authorize individuals to take such personally owned equipment to oversea destinations to the fullest extent possible within limits prescribed by applicable regulations.

b. Recreational equipment, whether issued to the unit, procured from appropriated or nonappropriated funds, or donated, may accompany units overseas as provided herein, or may be disposed of as provided in (3) and (4) below.

- (1) Radios, public address systems and other theatrical equipment, and motion picture projectors (procured from nonappropriated funds only) may accompany the unit to oversea destination. This equipment will be packed for oversea movement at home station and will be marked and shipped as organizational impedimenta "TAT" (to accompany troops).
- (2) Other recreational equipment of a nature regularly supplied oversea forces by the Special Services Division, which can be readily moved with the organization, may be taken overseas. This equipment will be properly processed and packed at home station and will be marked and shipped as organizational impedimenta.
- (3) Any other recreational equipment in possession of the organization which is not taken overseas will either be turned in to the property officer of the post (if Government property, including all purchases from appropriated funds), or be disposed of as provided in paragraph 24, AR 210-50 (if donated, or procured from nonappropriated funds).
- (4) Trophies, mementos, and articles having a sentimental or historical value to the organization not taken overseas will be turned over to the station commander (transportation officer) for shipment to Washington Quartermaster Depot, Cameron, Virginia, for storage. Unit commanders are responsible that such items are properly processed and packed; that each container bears the complete designation of the unit and is plainly marked "Organizational Trophies"; and that packing lists are prepared setting forth the complete organizational designation of the unit and a detailed list of the items in each container. One copy of the packing list will be placed in each container; one copy will be securely fastened to the outside of each container under a protective covering, labeled "packing list"; one copy will be forwarded with an appropriate covering letter to The Adjutant General for his permanent records; one copy will be retained for the organization's records. The Washington Quartermaster Depot will not provide storage for clearly inappropriate items such as bulky and perishable items which will be disposed of in accordance with (3) above.

c. Unit commanders may authorize individuals to take overseas personally owned portable radios, portable musical instruments, and small recreational items. This equipment will be packed at the home station and marked and shipped as organizational impedimenta "TAT" (to accompany

troops). Individuals should be advised of the possibility of loss and/or damage in transit.

4. DISTRIBUTION OVERSEAS. a. Policy. All recreational equipment provided by the Special Services Division will be supplied overseas commands through the commanding generals of overseas theaters, departments, commands, or independent task forces, (hereinafter referred to as overseas commands), whose responsibility it will be to control the issue and distribution of such equipment in accordance with established War Department policies relating to special services activities.

b. Procedure.

- (1) The Chief, Special Services Division, will make available to overseas commands, through appropriate ports of embarkation, quarterly credits for recreational equipment. Requisitions will be forwarded by the overseas command direct to the appropriate port of embarkation for supply in kind, in accordance with current price lists furnished by the Special Services Division. Credits will be allocated on the basis of War Department troop strength figures.
- (2) Overseas commands will be notified of available quarterly credits at least 90 days in advance of the quarter in which the credits may be used. Requisitions for recreational equipment should be submitted through normal channels to the appropriate port of embarkation at least 60 days in advance of the beginning of the quarter in which they are to be charged. Ports of embarkation will edit requisitions in accordance with credit balances available to the respective overseas commands for the designated quarter. All items on approved requisitions will be extracted by the port commander and forwarded to the Chief, Special Services Division. Requisitions for nonstandard items (see (5) below) will be accompanied by a statement of the unobligated balance of credits for items of this type. The Chief, Special Services Division, will determine if items requested may be procured through appropriated funds, and will direct the supply of approved items by such means as he may deem proper.
- (3) The quarterly credits against which shipments will be charged will be determined by the period in which the shipment is scheduled to move, and not the date of requisition or date of actual shipment. Shipments will be charged to periods in which they were originally scheduled and overseas commands may either submit supplementary requisitions or allow credits for early periods to carry over to later periods; however, no credit balance may be carried over from one fiscal year to the next fiscal year.
- (4) Ports of embarkation will advise monthly the appropriate overseas commands of the unobligated credits of their commands.
- (5) Nonstandard items considered necessary by overseas commands will be supplied on requisitions subject to approval by the Chief, Special Services Division, and will be charged in the same manner as indicated in (3) above. Requisitions for this type of equipment will reflect estimated prices; actual cost prices, however, will be the basis of charges by appropriate ports of embarkation against quarterly credits established for the overseas command. Such prices will be furnished ports of embarkation by the Chief, Special Services Division. The Chief, Special Services Division, in authorizing credits may indicate limits within which requisitions for unlisted items and nonstandard items may be approved.

- (6) The port of embarkation will not accept requisitions in excess of the credit balance available to the appropriate overseas command. If the needs of an overseas command for recreational equipment exceed the quarterly credits authorized by the Chief, Special Services Division, as provided in para. 4b (1) above, requests for additional credits may be submitted with accompanying justification to the Chief, Special Services Division. Similarly, if the need is substantially less than current allotments, excess credits will be reported to the Chief, Special Services Division.
- (7) The following items of recreational equipment will be distributed to overseas commands by the Chief, Special Services Division. These items will not be charged against the credits referred to in (1) above. They will be furnished upon request of the commanding generals of the respective overseas commands for automatic distribution by the Chief, Special Services Division. Quantities shipped will vary, depending on availability of funds and the critical nature of the materials. The list includes--
  - (a) Soldier show books and folios.
  - (b) Magazine sets (including the Army Hit Kit).
  - (c) V-discs (phonograph records).
  - (d) Armed Services Editions (Council Books).
  - (e) Orchestrations.
- (8) Library books (fiction and non-fiction) other than those referred to in (7) above will be supplied on requisition without charge against the quarterly credit allotment within the limit of funds available to the Chief, Special Services Division. Separate requisitions will be forwarded by the commanding generals of the overseas commands, direct to the appropriate port of embarkation.

c. Disposition of excess equipment.

- (1) Recreational equipment procured with appropriated funds which becomes excess will be disposed of in accordance with the provisions of TM 38-420, Disposition of Excess and Surplus Property in Overseas Commands.
- (2) Recreational equipment, with the exception of libraries, donated or procured from non-appropriated funds, which becomes excess will be disposed of in accordance with the provisions of AR 210-50.
- (3) Libraries, whether procured from appropriated or nonappropriated funds or donated, which become excess will be disposed of in accordance with TM 38-420.

5. RESCISSION. Section IV, WD Circular 344, 1944, and WD Memorandum W35-44, 6 May 1944, Basis of Issue of Special Services Items Supplied on Overseas Requisitions, are rescinded.

(AG 418 (10 Sep 46))

IX. RESCISSION. 1. Section II, WD Circular 153, 1942, is rescinded. (AG 221 (29 Aug 46))

2. WD Supply Bulletin 10-271, 1 February 1946, Zone of Interior Maintenance of Materials Handling Equipment for which The Quartermaster General has Procurement Responsibility, is rescinded.

(AG 300.5 (11 Sep 46))

3. Submission of the report, Monthly Report on Occupancy, Budget Bureau No. 63-R 222.3 and Reports Control Symbol AA-10-05, is no longer required. Section VII, WD Circular 19, 1946, as amended by section VII, WD Circular 115, 1946, is rescinded.

(AG 600.12 (4 Sep 46))

T/O & E 3-157. The date appearing on T/O & E 3-157, Chemical Warfare School Composite Troop Unit, Chemical Warfare School, Edgewood, Maryland, is changed to read: 3 August 1946.  
320.3 (13 Sep 46))

TM 14-1008. Paragraph 49, TM 14-1008, is rescinded and the following substituted therefor:

FORM OF AUDIT REPORT. The audit report presented below sets forth the minimum information required by the Army Motion Picture Service and in no way limits the scope of the audit or any additional information that the auditor might wish to present in his report. The audit will include a copy of the weekly financial statement for the last of the period under audit as a supporting document to his report. It will be noted that the report requirements (par. 7), have been standardized for the purpose of this particular type of audit. A copy of each report of audit will be furnished by the army commander or the appropriate Army Air Forces commander direct to the Army Motion Picture Service, Special Services Division, Washington 25, D. C. Information concerning the action taken by the post commander, and by the army commander or Army Air Forces commander on discrepancies and recommendations contained in the audit report will accompany this copy, or if not immediately available will be transmitted upon completion of action.  
330.7 (13 Sep 46))

BY ORDER OF THE SECRETARY OF WAR:

SPECIAL:  
L. B. LEWIS  
Brigadier General  
Acting The Adjutant General

DWIGHT D. EISENHOWER  
Chief of Staff

9 Apr 58

Mr. Budlong 'phoned and said  
have checked all files in-  
g stored files and they  
t have any that go as far  
as 1926.

have their permission to  
he article and whatever  
ductions of the photos we  
to make, but would like the  
omary credit."

e.m.t.

8 Apr 1958

HCP,

Col Elser said he gave the  
1926 edition of QST to Frank  
Kantor to run off the photos.

Col Gibbs authorized the  
'phone call to the American Radio  
Relay League, 36 LaSalle Road,  
W. Hartford, Conn., Mr. Budlong,  
Managing Sec'y., Adams 6-2535.  
Mr. Budlong said there would be  
no problem to reproduce the  
article, but inasmuch as the  
photos are so old he doubts they  
are in good condition and, fur-  
ther, that the 1926 files are  
still available. He asked for  
24 hours in which to give me an  
answer and will return my call.

e.m.t.

rather than labor any further over such simple changes, we refer you to the detailed construction adjustment sections of the original article.

<sup>2</sup> See "What To Do About Satellites," this issue. — *Editor.*

# Strays

space being in the headlines so much these days, only fitting that we consider amateur awards which end the difficulty and romance even of WAS. For years there has reposed in the offices of your quarters this handsome cup shown at the right. It donated by Fred Elser, now W2GVU but who has many, many calls throughout the world, and by S. M. S., who at one time was SCM of the Philippines and AICY. This cup, or whatever it is, is to be awarded first amateur (on Earth) who establishes two-way via amateur radio with the planet Mars. If you who aspire to contact outer space, remember one of your rewards may be this impressive Elser's trophy!

7352 H-51  
HEADQUARTERS  
FORT MONMOUTH NEW JERSEY

\*MEMORANDUM

27 December 1956

NUMBER ~~30-11~~

105-3

(Effective until 27 December 1958 unless sooner rescinded or superseded)

AMATEUR RADIO OPERATIONS

1. PURPOSE. The purpose of this memorandum is to govern the installation, operation, or modification of any privately-owned amateur radio station located on the post and/or satellite areas. The term "privately-owned amateur radio station" as used in this directive is construed to mean both fixed and mobile stations.

2. AUTHORITY TO INSTALL. Letters of application for authority to install and operate an amateur radio station on the post and/or satellite areas will be submitted to the Signal Officer, this headquarters, in quintuplicate, and will contain the following information:

a. Name, SN, grade, organization, and quarters address of applicant.

b. Amateur station call letters and date of issuance of license by the Federal Communications Commission.

c. Location of proposed station. For mobile stations, the make, model, state license number, and post license number will be given.

d. Probable operating frequencies and type of emission.

3. If approved, the Signal Officer will notify the applicant of such approval and authorize him to proceed with the installation of the station.

4. INSTALLATION AND INSPECTION. The following requirements will be complied with:

a. Transmitting and receiving antennae will not cross over, be in close proximity to, or attached to any telephone or power pole, or be installed on a slate roof. Installation of unsightly antennae will not be permitted, or buildings or premises marred in such a way that immediate restoration is impossible.

b. Maximum power input to any installation shall not exceed 1000 watts taken from any receptacle, outlet, switch or plug except with the written approval of the Engineer. No change will be made to any part of the lighting or power system of the post without specific authority. (See Section III, Post Regulations, 15 January 1956)

c. Metal antenna structures will be properly grounded.

\*This memorandum rescinds Memorandum Number 30-4, Headquarters Signal Corps Center and Fort Monmouth, 11 January 1955, including C 1, 15 November 1955.

16.0



Memo Nr 30-11, Hq Ft Mon, 27 Dec 56 (cont)

d. Antenna lead-in will be insulated from the building by approved "stand-off" insulators to the point of entry into the building. At point of entry to building the lead-in will be insulated from the building by observing good engineering practices.

e. Proposed installation plans may be submitted to the Signal Officer, either formally or informally, for tentative approval.

5. Upon completion of the installation, and before operation of the station, the applicant will submit a written request to the Signal Officer for inspection of the installation. The Signal Officer or his designated representative, and a representative of the Engineer, will make an inspection to insure that the above listed installation requirements have been complied with.

6. If the results of this inspection are satisfactory, the Signal Officer will notify the owner that the station may be placed in operation.

7. All expenses incident to amateur radio stations are to be borne entirely by the individual concerned. Attention is directed to AR 105-70, which prohibits the use of government-owned equipment without specific approval of the Post Commander.

8. RESPONSIBILITY. Amateur operators will insure that their transmitters do not radiate spurious signals and will be prepared at all times to demonstrate that they are not causing interference with properly installed television and FM receivers. Failure to comply with this requirement will result in the imposition of quiet hours on the interfering station from 1700 to 2300 hours on weekdays and 1300 to 2300 hours on weekends and official holidays, on those amateur bands where interference is occurring. Upon demonstration that interference has been eliminated, this restriction will be removed.

9. Amateur operators will comply with existing Federal Communication Commission Regulations pertaining to installation and operation on the reservation.

10. Owners of amateur stations will notify the Signal Officer of any intention to change the location of a fixed station or the vehicle in which a mobile amateur station is located. Such notification will include the information required by paragraph 2, above.

Memo Nr 30-11, Hq Ft Mon, 27 Dec 56 (cont)

11. Amateur operators will notify the Signal Officer of intent to discontinue operation of any amateur radio station authorized to operate on the reservation or its satellite areas.

(SIGFM/SO 676)

FOR THE COMMANDER:

OFFICIAL:

CHARLES L. OLIN  
Colonel, GS  
Chief of Staff



C. V. BURTON  
Lt Col, SigC  
Act Asst AG

DISTRIBUTION

M plus

Chief Signal Officer ..... 2

HIST

HEADQUARTERS  
FORT MONMOUTH NEW JERSEY

\*MEMORANDUM  
NUMBER 105-3

8 October 1958

(Effective until 8 October 1960 unless sooner rescinded or superseded)

AMATEUR RADIO OPERATIONS

1. PURPOSE. The purpose of this memorandum is to govern the installation, operation, or modification of any privately-owned amateur radio station located on the post and/or satellite areas. The term "privately-owned amateur radio station" as used in this directive is construed to mean both fixed and mobile stations.

2. AUTHORITY TO INSTALL. Letters of application for authority to install and operate an amateur radio station on the post and/or satellite areas will be submitted to the Signal Officer, this headquarters, in quintuplicate, and will contain the following information:

a. Name, SN, grade, organization, and quarters address of applicant.

b. Amateur station call letters and date of issuance of license by the Federal Communications Commission.

c. Location of proposed station. For mobile stations, the make, model, state license number, and post license number will be given.

d. Probable operating frequencies and type of emission.

3. If approved, the Signal Officer will notify the applicant of such approval and authorize him to proceed with the installation of the station.

4. INSTALLATION AND INSPECTION. The following requirements will be complied with:

a. Transmitting and receiving antennae will not cross over, be in close proximity to, or attached to any telephone or power pole, or be installed on a slate roof. Installation of unsightly antennae will not be permitted, or buildings or premises marred in such a way that immediate restoration is impossible.

b. Maximum power input to any installation shall not exceed 1000 watts taken from any receptacle, outlet, switch or plug except with the written approval of the Engineer. No change will be made to any part of the lighting or power system of the post without specific authority. (See Section III, Post Regulations, 15 January 1956)

\*This memorandum supersedes Memorandum Number 105-3, this headquarters, 27 December 1956.

Memo Nr 105-3, Hq Ft Mon, 8 Oct 58 (cont)

c. Metal antenna structures will be properly grounded.

d. Antenna lead-in will be insulated from the building by approved "stand-off" insulators to the point of entry into the building. At point of entry to building the lead-in will be insulated from the building by observing good engineering practices.

e. Proposed installation plans will be submitted to the Signal Officer, either formally or informally, for tentative approval.

5. Upon completion of the installation, and before operation of the station, the applicant will submit a written request to the Signal Officer for inspection of the installation. The Signal Officer or his designated representative, and a representative of the Engineer, will make an inspection to insure that the above listed installation requirements have been complied with.

6. If the results of this inspection are satisfactory, the Signal Officer will notify the owner that the station may be placed in operation.

7. All expenses incident to amateur radio stations are to be borne entirely by the individual concerned. Attention is directed to AR 105-70, which prohibits the use of government-owned equipment without specific approval of the Post Commander.

8. RESPONSIBILITY. Amateur operators will insure that their transmitters do not radiate spurious signals and will be prepared at all times to demonstrate that they are not causing interference with properly installed television and FM receivers. Failure to comply with this requirement will result in the imposition of quiet hours on the interfering station from 1700 to 2300 hours on weekdays and 1300 to 2300 hours on weekends and official holidays, on those amateur bands where interference is occurring. Upon demonstration that interference has been eliminated, this restriction will be removed.

9. Amateur operators will comply with existing Federal Communication Commission Regulations pertaining to installation and operation on the reservation.

10. Owners of amateur stations will notify the Signal Officer of any intention to change the location of a fixed station or the vehicle in which a mobile amateur station is located. Such notification will include the information required by paragraph 2, above.

Memo Nr 105-3, Hq Ft Mon, 8 Oct 58 (cont)

11. Amateur operators will notify the Signal Officer of intent to discontinue operation of any amateur radio station authorized to operate on the reservation or its satellite areas.

(SIGFM/SO 676)

FOR THE COMMANDER:

OFFICIAL:



H. L. WHITTEN  
Colonel, AGC  
Adjutant General

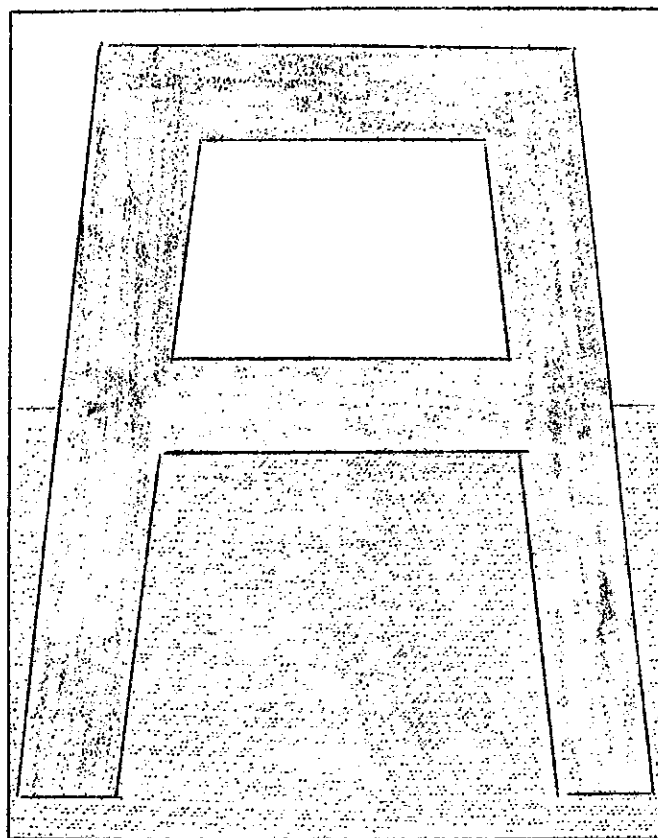
CHARLES L. OLIN  
Colonel, GS  
Chief of Staff

DISTRIBUTION

M plus

Chief Signal Officer ..... 2

# MARS BULLETIN



MILITARY AFFILIATE RADIO SYSTEM  
HEADQUARTERS FIRST ARMY  
GOVERNORS ISLAND, NEW YORK 4, NEW YORK

MARCH 1954

HEADQUARTERS FIRST ARMY  
Governors Island, New York 4, New York  
Office of the Army Signal Officer

Dear MARS Member:

The next First Army MARS Advisory Committee Meeting will take place at 641 Washington Street (old Federal Building) New York City at 1830 hours Saturday, 27 March 1953.

The agenda for the meeting appears in this issue of the Bulletin.

Major James A. Long, Chief MARS Army stated that he will attend the meeting.

As in the past MARS Members other than Advisory Committee Members are invited to attend in an observer capacity, the privilege of voting being reserved for committee members.

There will be an informal gathering for dinner prior to the meeting for those who desire to attend at 1730 hours at Stonewall Inn, 51 Christopher Street (three blocks east of 641 Washington Street just east of Seventh Ave).

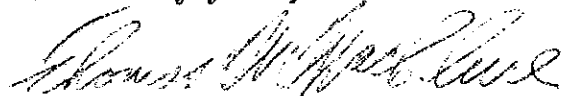
First Army MARS Supply Bulletin Number 5 is included in the mailing with this issue, it contains expendable items as well as items authorized for cannibalization. Conditions of issue are outlined in the supply bulletin.

Also included are three (3) FAP Form 67 cards for your use in reporting station activity. It will be noted that these cards differ from those issued in the past in that they bear a return address to MARS Director, First Army Signal Section, Governors Island, New York 4, New York. It is desired however, that these cards only be used upon the exhaustion of cards now in your possession return addressed to Fort Wadsworth, Staten Island 5, N. Y.

In this issue will also be found instructions for the preparation of these activity report cards.

CRU and 73

Fraternally yours,



THOMAS W. MacCLURE  
Major, Signal Corps  
MARS Director, First Army



Agenda First Army MARS Advisory

Committee Meeting

1. Report of NCS's for period 1 September 1953 through 15 March 1954.
2. Report of First Army MARS Director.
3. Review of Frequency allocations First Army MARS SOI Items 21-1 and 22-2.
4. MARS Supplies.
5. First Army MARS Bulletin.
6. Duties of Monitoring Stations.
7. Proposed First Army MARS Training Program.
8. Traffic Handling Problems.
9. Retransmission of WAR/AIR Broadcasts.
10. Single Sideband Operations.
11. Time Reserved for Major James A. Long, Chief MARS-Army.

\*\*\*\*\*

AA2USA PHONE PATCH

By J. Brumbelow, Maint. Ch.  
T. A. Greene, Chap

Although many phone patch circuits have been seen recently this one which is in use at AA2USA is being submitted because of its excellent performance, coupled with simplicity of design and the use of readily obtainable components.

Operation is also simple. Throw speaker and mike switches; adjust pot for proper audio level and patch is in use. Pot eliminates need to readjust speech amplifier when changing from patch to normal operation. Figure 2 is a modification that may be needed on some transmitters. R4 is coarse screw-driver adjust set to prevent overmodulation when R5, fine adjust, is set at highest input level.

Separate toggle switches have been used as it has been found helpful at times to be able to put only the receiver output on the phone line for audio level adjustment purposes; phone mike will not modulate rig unless both switches are thrown. Only one side of the phone line is broken when patch is not in use, but no difficulty has been experienced from this arrangement.

The speaker is also automatically disconnected when the patch is in. The transformer is the secret of the unit and the listed Stancor item should be obtained for best results. Patches at AA2USA were constructed in 7 x 9 x 2 boxes for panel mounting purposes.

See sketch on page three.

# CIRCUIT DIAGRAM AND PARTS LIST, AA2USA PHONE PATCH

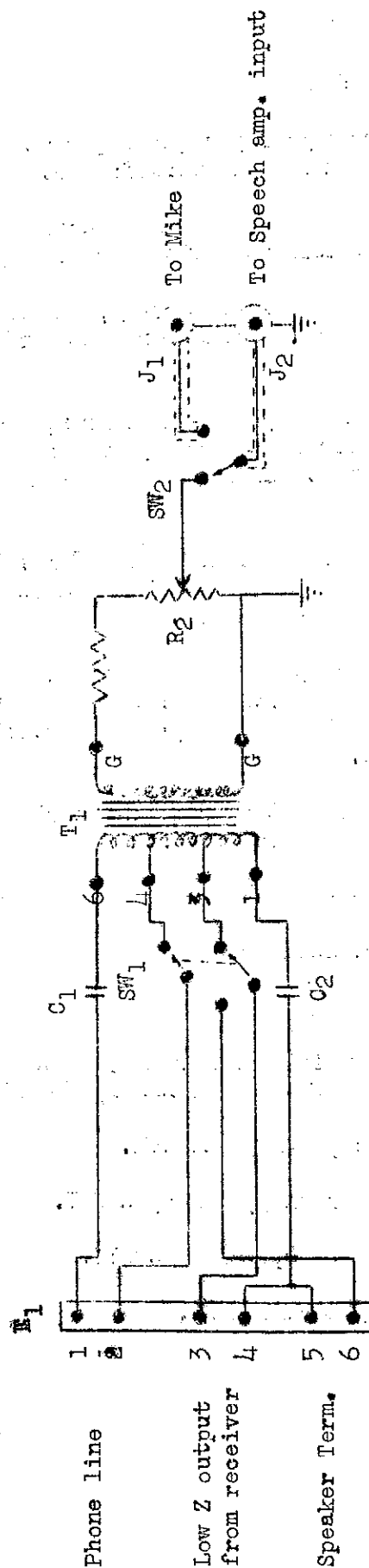


FIG. 1 BASIC CIRCUIT

- E1 6 position terminal  
 C1, C2 2 mfd. 400v.  
 T1 Stancor AL352  
 SW1 DPDT  
 SW2 SPDT  
 J1, J2 Chassis mount mike connector  
 R1 22K  $\frac{1}{2}$ W  
 R2, R5 100K potentiometer  
 R3 90K  $\frac{1}{2}$ W resistor  
 R4 10K potentiometer

NOTE: If one side of speaker and output transformer are grounded, Terminal 4, 5 on E1 may be omitted and C2 grounded.

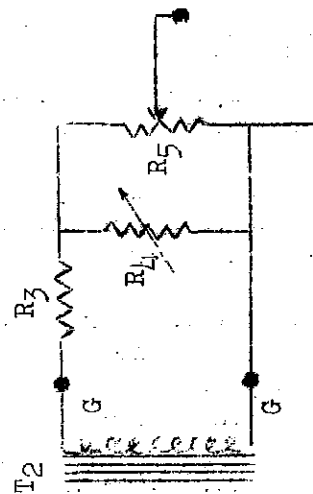


FIG. 2 MOD. 1

## RENEWAL OF MARS MEMBERSHIP

The Chief MARS-Army has announced a new policy regarding renewal of MARS Membership pending availability of the new MARS Certificate.

The new procedure is outlined below and supercedes instructions contained in Item 5-1, MARS-Army SOI which will be revised accordingly.

Thirty days prior to expiration date of MARS membership, the member concerned should request copies of DD Form 630. Forms furnished will be plainly stamped RENEWAL.

All items on the form should be completed by member desiring renewal, paying particular attention to: date FCC license expires, current address, station equipment and present military status. Signature of witness will not be required on renewals.

Renewals will be processed as rapidly as possible by the Chief MARS-Army in the order received. Members will be notified by MARS Radiogram from MARS Headquarters that membership has been renewed.

Applications for renewal will not normally be approved if member's records indicate less than five (5) hours of activity during the last effective year of membership. Exceptions will be made provided sufficient justification is included with application.

The Chief MARS-Army will continue to issue Letters of Authorization to new members until the MARS Certificates are available.

\*\*\*\*\*

### Results of "Item" Frequency

#### Transmitter Hunt

Results of the transmitter hunt held at 141400R March 1954 on "Item" frequency at Bayonne, New Jersey under the direction of A2NUI, John McGrath follow:

1st Prize, Gonset 2 meter convertor, won by A42AUR.

2nd Prize, Master Mount and 10 meter whip, won by A2KVT.

3rd Prize, Crystal Microphone and stand, won by A2EYT.

Congratulations to the winners for a job well done.

## STATEMENT OF MARS POLICY ON INTER-SERVICE OPERATION

The following joint MARS policy is stated for information and conformance of all MARS stations:

1. MARS Stations, affiliated with one service, may operate on MARS shared frequencies with MARS stations of another service under any of the following conditions:

a. Prior approval of such operation has been obtained from MARS Headquarters.

b. Emergency communications conditions exist.

c. Delivery of the message is of such importance that use of official or commercial circuits is impractical.

2. Literal radio circuits between Army and Air Force Headquarters and/or installations are authorized, provided they are established on the shared frequencies.

a. Requests for Inter-Service schedules will be on a non-interference basis to established Intra-Service schedules.

3. This statement shall not be interpreted as authorizing Army MARS stations to operate on frequencies assigned exclusively to Air Force MARS or vice versa.

4. The MARS shared frequencies are as follows:

3497.5 kc    6997.5 kc    14405 kc    20994 kc    27994 kc

\*\*\*\*\*

## FATHER AND SON PARTICIPATION

In screening the FAP67 cards it was discovered that we have a Father and Son Team participating in First Army MARS Activities. They are:

AN2CON, Mark J. Grossman (Son) and A2HVC, Maurice Grossman (Father).

Do we have any additional teams of this kind which we have not yet uncovered?

We extend our heartiest congratulations to you both.

# PARTICIPATION IN MARS BY ARMY AREAS

The following is a comparison of number of members, number of active members and percentage of participation in the MARS for the six Continental Army Areas for the period from October 1953 through December 1953.

## OCTOBER

AREAS	NUMBER OF MEMBERS	NUMBER	PARTICIPATION
		ACTIVE	PERCENTAGE
First Army	682	101	14.7
Second Army	639	92	14.4
Third Army	315	124	39.4
Fourth Army	624	264	42.3
Fifth Army	823	95	11.5
Sixth Army	294	95	32.3
	<u>3377</u>	<u>771</u>	<u>22.8</u>

## NOVEMBER

First Army	695	99	14.3
Second Army	650	110	16.9
Third Army	327	133	40.7
Fourth Army	602	387	64.3
Fifth Army	822	59	7.2
Sixth Army	296	93	31.4
	<u>3392</u>	<u>871</u>	<u>25.7</u>

## DECEMBER

First Army	693	83	11.9
Second Army	651	120	18.2
Third Army	358	133	37.2
Fourth Army	606	320	52.8
Fifth Army	826	74	8.9
Sixth Army	305	100	32.8
	<u>3449</u>	<u>830</u>	<u>24.1</u>

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington 25, D. C.

FCC 54-307  
2148

In the Matter of

Amendment of Part 12, Rules  
Governing Amateur Radio Service,  
concerning operator examinations

Docket No. 10712

O R D E R

At a session of the Federal Communications Commission held at its  
offices in Washington, D. C. on the 10th day of March, 1954:

The Commission having under consideration its Notice of Proposed  
Rule Making in the above entitled matter wherein it was proposed to amend  
Sections 12.44(a) and 12.44(c) of Part 12 to provide for the examination  
of candidates for Novice and Technician Class amateur operator licenses  
by mail only, and to amend Sections 12.21(d), 12.44(a)(1) and 12.44(b)  
of Part 12 to reduce, from 125 to 50 miles, the distance from Commission  
examination points beyond which resident applicants are eligible to take  
a Conditional Class amateur operator examination; and

IT APPEARING, That the foregoing proposal and correction thereto  
was duly published in the Federal Register (18 FR 6438 and 18 FR 6547) on  
October 9 and 14, 1953, respectively, and that written comment was received  
from interested parties; and

IT FURTHER APPEARING, That the Commission has considered all written  
comments received, the weight of which (a) favors the giving of Novice  
and Technician Class amateur operator examinations by mail only and  
(b) opposes the extent of change in eligibility to take a Conditional  
Class amateur operator examination whereby the residence distance from  
Commission examination points would be reduced from 125 to 50 miles; and

IT FURTHER APPEARING, That the public interest would be served  
by amending the Rules so that (a) Novice and Technician Class Amateur  
Operator examinations be given by mail only and (b) the residence distance  
from Commission examination points be reduced from 125 to 75 miles:

IT IS ORDERED, That under the authority contained in Section 4(i)  
and 303(1) of the Communications Act of 1934, as amended, effective  
June 10, 1954, Sections 12.21(d), 12.44(a)(b), (c) of the Commission's  
Rules are amended without further proceeding, in the particulars set forth in  
the appendix attached hereto.

FEDERAL COMMUNICATIONS COMMISSION

Mary Jane Morris  
Secretary

Attachment  
Appendix

Released: March 11, 1954

## A P P E N D I X

PART 12, RULES GOVERNING AMATEUR RADIO SERVICE IS AMENDED IN THE FOLLOWING PARTICULARS:

1. AMEND SECTION 12.21(d) TO READ AS FOLLOWS:

(d) Conditional Class. Any citizen of the United States whose actual residence and amateur station location are more than 75 miles airline distance from the nearest location at which examinations are held at intervals of not more than 3 months for General Class amateur operator license; or who is shown by physician's certificate to be unable to appear for examination because of protracted disability; or who is shown by certificate of the commanding officer to be in the armed forces of the United States at an Army, Navy, Air Force or Coast Guard Station and, for that reason, to be unable to appear for examination at the time and place designated by the Commission.

2. AMEND SECTION 12.44(a) TO READ AS FOLLOWS:

(a) The examinations for Extra and General Classes of amateur operator licenses will be conducted by an authorized Commission employee or representative at locations and at times specified by the Commission. The examinations for Conditional Class, as well as Technician and Novice Class licenses, will be conducted in accordance with the provisions of paragraph (c) of this Section. The examinations for Conditional Class will be available only under one or more of the following conditions:

(1) If the applicant's actual residence and proposed amateur station location are more than 75 miles airline distance from the nearest location at which examinations are conducted by an authorized Commission employee or representative at intervals of not more than 3 months for amateur operator licenses; or

(2) If the applicant is shown by physician's certificate to be unable to appear for examination because of protracted disability; or

(3) If the applicant is shown by certificate of the commanding officer to be in the armed forces of the United States at an Army, Navy, Air Force, or Coast Guard station and, for that reason, to be unable to appear for examination at the time and place designated by the Commission.

3. AMEND SECTION 12.44(b) TO READ AS FOLLOWS:

(b) A holder of a conditional, technician, or novice class license obtained on the basis of an examination under the provisions of paragraph (c) of this section is not required to be re-examined when changing residence and station location to within a regular examination area, nor when a new examination location is established within 75 miles of such licensee's residence and station location.

4. AMEND SECTION 12.44(c) TO READ AS FOLLOWS:

(c) Each examination for Conditional Class license, or for Technician, or Novice Class license shall be conducted and supervised by not more than two volunteer examiners, whom the Commission may designate or permit the



applicant to select (not more than one examiner for the code test and not more than one examiner for the complete written examination). In the event the examiner for the code test is selected by the applicant, such examiner shall be the holder of an Extra Class, Advanced Class, or General Class amateur operator license; or shall have held, within the 5 years prior to the date of the examination, a commercial radiotelegraph operator license issued by the Commission, or within that time shall have been employed in the service of the United States as the operator of a manually operated radiotelegraph station. The examiner for the written test shall be at least 21 years of age. Examinations for Conditional Class will be available only under special conditions set forth in paragraphs (a)(1), (2), or (3) of this section.

Preparation of Monthly Participation  
Report (FAP Form No. 67)

A considerable number of members have queried us on the proper procedure for making out the Monthly Participation Report (FAP Form No. 67). The following instructions are issued for the information and guidance of all members in the preparation of these reports.

The report will indicate the number of hours of scheduled net operation in which a station and/or individual (S) has participated during the period covered by the report. Scheduled net operation is a prearranged drill period with two or more stations participating.

One hour of net operation will be shown for all periods of 1/2 hour or more of actual scheduled net participation, provided all stations desiring to check out early have the permission of the NCS to do so.

One hour of net operation will also be shown in cases where the NCS closes the net prior to scheduled closing time due to completion of net business or due to excessive interference, regardless of period of time net was actually operative.

Reporting of net participation for periods of less than one half(1/2) hour will be reported as the actual number of minutes engaged in net operation.

"Messages originated" will include only messages originated at station concerned.

"Messages Sent" will include messages originated and messages relayed.

"Messages Relayed" will include messages received from another MARS station or refiled from amateur band and retransmitted to another MARS station or forwarded to addressee by telephone or mail as well as messages received via MARS and refiled to amateur bands will also be counted as messages relayed.

Hours of CW operation and hours of phone operation are self-explanatory.

The "Remarks" portion of the form should contain participation by station and/or individuals in events of interest, assistance rendered in time of emergency, special events or MARS CPX (Command Post Exercise). Also to be included under "Remarks" are: General comments, suggestions and request for administrative forms (such as DA form 630 for renewal of membership, message or other publications). Request for MARS supplies and/or equipment will not be entered on this form, but rather should be submitted on "Request for MARS Equipment" form or by message or letter to enable filing in "Supply Jacket File".

History of MARS

plan & brief for its origin in 1925

Fig 7, Bull. March 1929 pp. 39-45

excellent and detailed (documented)  
for revised plan of 1929

## MARS

Q. What is MARS?

A. MARS is a world-wide organization of military and civilian radio stations.

Q. What do the letters M A R S stand for?

A. Military affiliate radio system.

Q. Who controls MARS?

A. MARS is a joint Army-Air Force system under the control of the Chief Signal Officer and Director of Communications of the Air Force.

Q. What is the purpose of MARS?

A. MARS was established for the following reasons:

1. To provide a back-up radio communications system in time of disaster or National Emergency.

2. To train qualified personnel in proper military message handling.

3. To provide a useable channel of communications for the Red Cross, Corps of Chaplains and Special Services.

4. To promote study and experimentation in military radio communications.

5. To provide a facility to send personal messages for morale purposes.

Q. When was MARS established?

A. On 26 November 1948 by authority of the Secretaries of the Army and Air Force.

Q. Who may join the MARS organization?

A. Membership in MARS is open to any individual (including retired personnel) of the military service, Army Reserve, National Guard, or Reserve Training Corps who possesses a valid amateur radio operator's license issued by the Federal Communications Commission or issued under regulations of an overseas commander. Any non-military (civilian) FCC licensed amateur radio operator over 16 years of age who possesses a station in operation and agrees to operate under regulations prescribed for the operation of MARS is also eligible.

Q. How does the MARS system work?

A. There are thousands of MARS stations scattered over the United States and overseas where United States troops are stationed. This includes such remote locations as Korea. In the states the stations are divided into Army Area stations under the control of the Army MARS Director. The network is further sub-divided into state controlled stations. Each station is controlled so that message handling is simplified. If a message starts in New Jersey and is destined for California, for instance, it would be sent to the First Army MARS station, then to the Sixth Army MARS station, then to the state station in California.

Q. Where is the closest MARS radio station?

A. Fort Monmouth has recently officially opened a MARS radio station in Bldg 682. (This building is near the red-border parking lot and is directly behind the old open-air theatre on the main post. On 19 March 54 Maj Gen Kirke B Lawton cut the ribbon which officially opened the new station.

Q. Who may send messages from this station?

A. All United States military personnel and any civilians associated with Fort Monmouth may send messages from the Fort Monmouth MARS station.

7

Q. How can I send a message?  
A. Come over to Bldg 682 (MARS radio station) and fill in a message blank.

Q. May I see the equipment used at the Fort Monmouth MARS station?  
A. Yes, visiting the MARS station is encouraged at any time.

Q. May I operate the radio equipment in Bldg 682?  
A. If you are a licensed amateur radio operator and possess a valid license you are invited to use the amateur radio facilities located in studios of the MARS radio station building. If you are a MARS member you can arrange to operate the MARS equipment.

Q. How can I get an amateur radio license from the FCC?  
A. You must pass an FCC exam on radio code and theory. You might prepare yourself for this exam by joining the Fort Monmouth Radio Club and using the MARS radio station instructional facilities provided for club use. For further info on this subject consult personnel at the station.

Q. How often can I send a MARS message?  
A. As often as you like.

Q. Where can I get application blanks for MARS membership?  
A. From station personnel or the MARS Director, Bldg 682.

Q. What are the hours of operation of the MARS radio station?  
A. At present the station is open from 0700 to 2300 daily. In the near future it is expected that the hours will be extended. Watch the published bulletins.

Q. Where can I get additional information not covered in these questions?  
A. From the MARS station personnel or by calling extension 3255.

SUBJECT: Application for Membership in Military Affiliate Radio System

TO:

1. Thank you very much for your recent inquiry concerning membership in the Military Affiliate Radio System (MARS).

2. This is to advise that membership in MARS is open to all amateurs who meet the following qualifications:

a. That the applicant is 16 years of age or over. Applications from minors must be witnessed by parent or guardian.

b. That the applicant possesses a valid FCC Amateur License. Novices and technicians may operate on certain frequencies only.

c. That the applicant has in his (her) possession and in operation the necessary equipment to operate in the MARS networks.

d. That it is understood by the applicant that the issuance of any equipment to the civilian amateur MARS member is specifically forbidden.

e. That membership in the MARS system will in no way affect the member's draft status or his (her) availability for essential jobs in industry.

f. That the applicant executes the application form, in duplicate, and that he (she) sign the release clause at the end of the MARS application blank. NOTE: This clause is intended to release the government of all claims resulting from participation in the MARS by civilian amateurs who have no military affiliation but is not intended to apply and shall not be construed to apply to statutory rights of personnel in the military services, nor to any other rights of individuals under policies of life insurance or other forms of contracts with the United States.

3. Individual members will be issued a SOI (Communications Instructions), a call sign for use on military frequencies, instructions as to frequency and time for individual stations to report to a net and a copy of the MARS Bulletin which is issued periodically.

4. Inclosed is information on MARS which we feel will answer any questions you may have regarding the system. It is to be noted that the plan of organization of the MARS network within the First Army Area is from Army:

- to State;
- to County;
- and county to Township

where the preponderance of activity so justifies this additional echelon.

5. It is anticipated that we shall have the pleasure of your participation in the MARS system in the very near future. If we may be of further assistance to you do not hesitate to communicate with us.

FRANK A. WESLEY  
Capt            SigC  
MARS Director, NJ

CONSOLIDATED NET ASSIGNMENT NEW JERSEY MARS

EFFECTIVE 25 APRIL 1954

<u>A2HX/A</u> <u>A2HX/B</u>	<u>A2NUI/A</u>	<u>A2VPO/A</u>	<u>A2PXU/A</u>
A2ASG	AA2AFM	A2AFM	A2BII
A2ACW	A2EDX	AA2AUR	A2BPH
A2BIN	AA2BJW	AA2BLS	AA2BWQ
AA2BLS	AA2BLS	A2BRH	A2CBT
A2BPM	A2BPM	AA2BWQ	A2DXD
A2BUX	A2BUX	A2FNM	A2ESW
AA2BWQ	AA2BWQ	A2GND	A2FNM
A2CBT	A2CBY	AA2GVZ	A9HLC
A2CCS	A2ESW	A2GZM	A2IMG
A2CVN	A2FNM	A9HLC	A2IUJ
A2DXD	A2GCV	A2IFI	A2IWK
A2DYW	A2GZM	A2IUJ	A2JBN
A2ENM	A2IFI	A2IWK	A2LST
A2ESW	A2IUJ	A2KVT	A2LTI
A2FNG	A2IWK	A2LST	A2OUT
A2FNM	A2KVT	A2NKD	A2PXU
A2FOY	A2LSH	A2NUI	A2TDU
A2GTK	A2LST	A2NZT	A2UMP
AA2GVZ	A2MRG	A2ODV	AA2USA
A2HTD	A2NAK	A2OYS	A2VPO
A2IAZ	A2NKD	AA2USA	A2ZDR
A2IIM	A2NUI	A2VPO	A2ZI
A2IUJ	A2NZT	AA2NAH	
A2JBN	A2ODV	A2YGY	
A2LST	A2OUS	A2ZAL	
A2LTI	A2UMB	A2ZOE	
A2IMG	AA2USA	A2ZSA	
A2NKD	A2VPO		
A2NUI	AA2NAH		
A2ODV	A2YKY		
A2OM	A2ZAL		
A2OUS			
A2PXU	AA2USA/A	A2UMP/B	AA2WAO/A
A2QLP			
A6RRZ	A2ABF	A2ASG	A2BPM
A2TDU	A2BDP	AA2BWQ	AA2BWQ
A2UMP	AA2ADU	A2CVN	A2CBT
AA2USA	A2BIM	A2EGM	A2DXD
AA2NAH	A2LTI	A2FNM	A9HLC
AA2WLC	A2PXU	A2FPM	A2HX
A2VPO	A2UMP	A9HLC	A2LTI
A2YGY	AA2USA	A2HX	A2IMG
A2ZAL	AA2WAO	A2KEJ	A2OUT
A2ZDR	A2ZI	A2LST	A2PXU
A2ZI		A2MMG	A2TDU
A2ZQL		A2PXU	A2UMP
		A2TDU	AA2USA
		A2UMP	AA2WBC
		AA2USA	A2ZI
		AA2WAO	
		A2ZI	



A0JEM

A2DED  
A2GZM  
A2HLZ  
A2HX  
A0JEM  
A2LST  
A2LTI  
A2NAK  
A2NKD  
A2NUI  
A2PKU  
A2QND  
A2TDU  
A2UAP  
A2USA  
A2VPO  
A2WAO  
A2ZAL  
A2ZI

A2NKD/B

A2BBK  
A2BNF  
A2FLW  
A2FPM  
A2HAZ  
A2MMG  
A2NAK  
A2NKD  
A2OKM  
A2OUT  
A2QND  
A2QUH  
A2USA  
A2UAP  
A2WAO  
A2WAH  
A2ZI

A2ZI/A

A2BBK  
A2FPM  
A2FZG  
A2GTK  
A2HAZ  
A9HLC  
A2KEJ  
A2NKD  
A2PXU  
A2QND  
A2QUH  
A2TSN  
A2UAP  
A2USA  
A2WAH  
A2WAO  
A2ZAL  
A2ZI

A2UAP/A

A2ASG  
A2MUR  
A2BUX  
A2BWQ  
A2ESW  
A2FLW  
A2FPM  
A2GAK  
A9HLC  
A2NAK  
A2OM  
A2TDU  
A2UAP  
A2USA

A2NKD/A

A2BCK  
A9HLC  
A2IFI  
A2NKD  
A2QND  
A2QUH  
A2USA  
A2VPO  
A2WAH

A2TDU/B

A2BTM  
A2HTD  
A2HX  
A2IWK  
A2LST  
A2LTI  
A2OM  
A2QND  
A2TDU  
A2USA  
A2WAO  
A2ZQC

A2DXD/A

A2AR  
A2DXD  
A2TDU  
A2UAP  
A2USA  
A2WAO

A2USA/B

A2BBK  
A2BTM  
A2BNF  
A2FLW  
A2LST  
A2NKD  
A2USA  
A2VPO  
A2WAH  
A2WAO

A2HX/C

A2HX  
A2QLP  
A2UAP  
A2USA

A2NAK/A

A2AR  
A2BPM  
A2GND  
A9HLC  
A2IUJ  
A2NAK  
A2USA

A2TDU/A

A2HTD  
A2HX  
A2TDU  
A2USA

*Sent to Historical Branch by MARS  
April 1954*

#### MARS INFORMATION SHEET

Expansion of the Military Amateur Radio System-Army (MARS) to permit civilian amateur participation was announced in Washington by the Department of the Army, on 25 November 1950. The announcement came on the eve of the second anniversary of MARS operation.

MARS was activated in November, 1948, to provide a complete radio network throughout the continental U. S. which is readily available to military commanders, Red Cross representatives or other authorities who may be charged with emergency responsibilities in a given area. A master plan of MARS-Army shows:

- An Army Headquarters net;
- Six Continental Army area nets;
- A State Net for each state
- District nets within each state (As required)
- Such local nets as may be desirable within each district.

The authorization for civilian membership insures the continued use of MARS as a back-up communication system if activities and reserves of the Army are mobilized in an emergency.

The announcement made it clear, however, that a MARS membership does not affect draft status:

"Affiliation with or participation in the MARS will in no way affect the classification of any individual by draft officials or any other agency that might be created to deal with manpower mobilization problems."

Civilian members must be 16 years of age or older in order to qualify for MARS membership; they must possess a valid Federal Communications Commission amateur radio station license, and must agree to operate their stations in accordance with rules and regulations prescribed for the MARS by the Army. Only amateurs with personally owned stations in operation at time of application for membership can be considered. No radio equipment can be furnished civilian amateurs under existing law.

MARS stations are assigned military call signs and operate on military frequencies allocated to the system. MARS Bulletins and a manual of operating procedures are issued to all members free.

The Department of the Army plans expansion of MARS to:

- provide an instantly mobilized and highly flexible radio communication service for use by military and civil defense authorities on a local community basis;
- provide information and technical advice in fields of radio and electronic communication;
- plan, organize and operate coordinated and directed emergency communication activities in connection with the civil defense program;
- establish provisions for an integrated radio system whereby the various commands within the civil defense framework will function under coordinated policies; procedures and training methods while, at the same time, permitting each to retain its separate identity;
- provide training facilities and inducements for individuals interested in radio communication and other electronic fields to affiliate themselves with the MARS program.

Qualified radio amateurs who are interested in participating in the MARS Program should complete the inclosed application forms, in duplicate, and forward them to:

MARS DIRECTOR FIRST ARMY  
SIGNAL SECTION, BLDG 102  
GOVERNORS ISLAND, NEW YORK

OFFICE OF THE MARS DIRECTOR NEW JERSEY  
ACofS, G3 Bldg. 682  
FORT MONMOUTH, NEW JERSEY

I NEW JERSEY NET PLAN (Effective 250001Z April 1954)

NEW JERSEY MARS DIRECTOR A/JXM

MILITARY SNCS AA2USA						CIVILIAN SNCS A2DXD		
ALTERNATE SNCS AA2WAO						ALTERNATE SNCS A2UAP		
DAY	TIME	FREQ	Kcs	DESIGNATION	CALL	EMISSION	NCS	ALT NCS
SUN	0800-0900Q	4025	E *	NJS	A2HX/A	A3	A2HX	A2UAP
	0900-1000Q	4020	D	NJL	A2HX/B	A3	A2HX	A2TDU
	0900-1000Q	3237	B	NJH	A2UAP/A	A1	A2UAP	A2NAK
	1100-1200Q	27994	I	JNJ	A2MKD/A	A1	A2MKD	A2GZM
	1200-1300Q	27994	I	JNJ	A2NUI/A	A3	A2NUI	A2VPO
MON	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	1900-2000Q	2220	A	NJB	A2HX/C	A3	A2HX	AA2USA
	2000-2100Q	4025	E *	NJA	A2MKD/B	A1	A2MKD	A2QND
	2000-2100Q	27994	I	NJF	A2VPO/A	A3	A2VPO	A2LST
	2100Q	***		WAR BROADCAST			WAR/AIR	
	2115-2200Q	27994	I	NJG	A2NAK/A	A1	A2NAK	A2ZAL
TUES	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	1800-1900Q	4025	E *	JPM	AA2USA/A	A3	AA2USA	AA2WAO
	2000-2100Q	27994	I	NJF	A2VPO/A	A3	A2VPO	A2LST
	2100-2200Q	2220	A	NJC	A2TDU/A	A3	A2TDU	AA2USA
WED	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	2000-2100Q	4025	E *	NNJ	A2PXU/A	A3	A2PXU	A2LTI
	2000-2100Q	27994	I	NJF	A2VPO/A	A3	A2VPO	A2LST
	2100-2200Q	4020	D *	NJE	AA2WAO/A	A3	AA2WAO	A2TDU
	2100-2200Q	27994	I	NJG	A2NAK/A	A1	A2NAK	A2ZAL
THU	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	2000-2100Q	27994	I	NJF	A2VPO/A	A3	A2VPO	A2LST
	2100-2200Q	3497.5	C	NJK	A2ZI/A	A1	A2ZI	A2HAZ
FRI	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	2000-2100Q	4025	E *	SNJ	A2UAP/B	A3	A2UAP	AA2USA
	2100-2200Q	4020	D	JC	A/JXM/A	A3	A/JXM	AA2USA
SAT	0630-0700Q	3237	B **	JEB	A2DXD/A	A3	A2DXD	A2UAP
	1600-1700Q	4025	E *	NJI	AA2USA/B	A1	AA2USA	AA2WAO
	1700-1800Q	4020	D *	NJD	A2TDU/B	A3	A2TDU	AA2USA

\*\*\* War Broadcast on 3497.5, 6997.5, 14405 and 27994 kc. All stations should copy.

\*\* Easy Frequency, 4025, assigned as back-up frequency.

\* Baker Frequency, 3237, assigned as back-up frequency.

A1 may be used on A3 designated nets if necessary.

II DESIGNATION OF FREQUENCY CODE

2220 Kc	"A"	4020 Kc	"D"	14405 Kc	"G"
3237 Kc	"B"	4025 Kc	"E"	20994 Kc	"H"
3497.5 Kc	"C"	6997.5 Kc	"F"	27994 Kc	"I"

Frequencies will not be mentioned over the air. Use letters as above.

III DESIGNATION OF NORTHERN AND SOUTHERN NEW JERSEY

A. Counties in Northern New Jersey; Sussex, Passaic, Bergen, Warren, Morris, Essex, Hudson, Union, Hunterdon, Somerset, Middlesex.

B. Counties in Southern New Jersey; Mercer, Monmouth, Ocean, Burlington, Camden, Gloucester, Atlantic, Salem, Cumberland, Cape May.

FRANK A. WESLEY  
Capt SigC  
MARS Director, NJ

MARS RADIO SYSTEM; IMMEDIATE COMMUNICATIONS IN EMERGENCIES  
AA2USA

MARS, the Military Affiliate Radio System, was organized some six years ago to provide a standby emergency communications system, ready for immediate action in the event of breakdown of normal communications. The word "Affiliate" in the title indicates that civilian radio amateurs have joined with the military to provide this service.

About 90 per cent of the members of the system are civilian radio amateurs, using their own equipment, who have volunteered to spend from one to several hours per week in the training program conducted by MARS. The system consists of networks set up in all Army areas of the United States and controlled by the Military Stations. These areas are further subdivided into State control sections.

This station, AA2USA, is the military net control station for the state of New Jersey and its director, Capt Frank A. Wesley is also the Mars Director of New Jersey. It is from here that the operation and policy of New Jersey MARS is governed. First Army Mars is directed by Major MacClure, from Governors Island, while the entire system is under the supervision of Major Long at the Pentagon. Both Army and Air Force sponsor MARS programs.

AA2USA is open for operation from 0700 to 2300 seven days a week. During the week approximately 60 hours of net operation are logged. Twenty four hour operation is contemplated in the near future. In order that the system may be ready to handle official traffic at a moments notice a continual training program is in progress.

For this purpose personal messages are taken and relayed to destination. Anyone may send a message anywhere in the Continental United States, its possessions or to members of the Armed Forces Overseas; there is no charge for this service. By this means "live" traffic is obtained to familiarize all member stations with proper military procedure. It also provided a reserve group of civilians who in an emergency will be trained in military principles of communication.

In pre-opening operation during the month of February alone, AA2USA handled over 400 pieces of traffic. Assisting in this were over 100 active members of the MARS system in the State of New Jersey alone. Any licensed radio amateur is eligible for membership in the system upon application to the Commanding General of the army area in which he resides.

AA2USA also provides off-duty recreation to post personnel by providing radio facilities under the call of K2USA, for amateurs and their friends who may wish to contact home or just "rag chew." Studios 1 and 2 are for the MARS system, but Studios 3 through 6 have been reserved for this amateur operation. The station also provides facilities for meetings of radio groups, the teaching of Morse code and for instruction in theory necessary in the obtaining of an Amateur Radio License.

The station since its inception in Bldg T-96 on April 13, 1953 and since the move to the present location, Bldg T-682, has trained close to 50 students in ACP and JANAP radio procedure. These students volunteer for training on their own time and receive such training by actual on-the-air net operation. At present 16 such students are conducting evening and weekend nets.

Further information on the station may be obtained from the assigned personnel who, including Cap. Wesley, are M/Sgt Edward Martin, NCOIC; Cpl. Joseph Brumbelow, Maintenance Chief and Cpl. W. A. Greene, Chief Operator.